DOCUMENT RESUME

ED 028 428 24 AL 001 829

By-Ulibarri, Horacio

Interpretive Studies on Bilingual Education. Final Report.

New Mexico Univ., Albuquerque. Coll. of Education.

Spons Agency-Office of Education (DHEW), Washington, D.C. Bureau of Research.

Bureau No-BR-8-0609

Pub Date Mar 69

Contract-OEC-0-080-609-4531-010

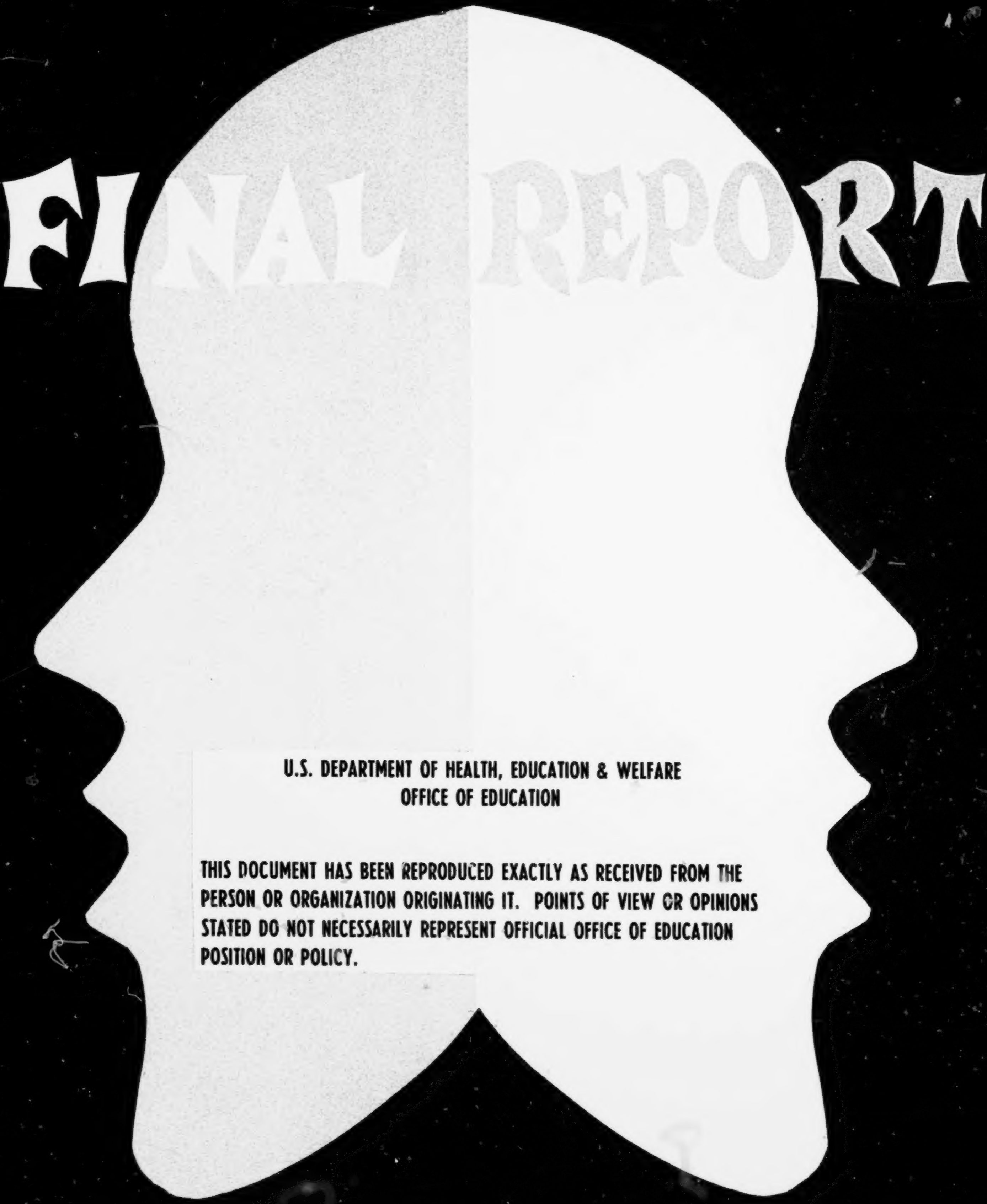
Note-151p.

EDRS Price MF-$0.75 HC-$7.65

Descriptors-American Indians, Annotated Bibliographies, Bibliographies, *Biculturalism, *Bilingual Education, *Bilingualism, Bilingual Students, Child Language, Community Relations, Cultural Background, Cultural Education, *English (Second Language), Program Descriptions, Project Training Methods, Spanish Speaking, Student Evaluation, *Teaching Methods, Testing

This project, carried out in 1968-1969, undertook as its main purposes (1) to review the research that has been conducted on bilingual education; (2) to obtain the recommendations on bilingual education from those persons who have been actively engaged in working with this problem; (3) to conduct on-site visitations to see at first hand programs of interest, programs with potential for achieving inter-group reactivity, and (4) to draw from the study implications for educational practice and administration, and research in the area of bilingual-bicultural education. The first main section of this report summarizes the purposes of the bilingual program, growth and development, language acquisition and learning, programs and methodology, projects, and tests and measurements. The second main section describes goals, the bilingual education program, the teacher and bilingual education, materials, teacher methodology, evaluation, and school and community relations. The final section deals with the same topics in terms of implications for research. An annotated bibliography on bilingualism is followed by a selected bibliography and a listing of projects and on-going programs in bilingual education. (AMM)

FINAL REPORT



U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

INTERPRETIVE STUDY ON
BILINGUAL EDUCATION

HORACIO ULIBARRI: DIRECTOR
JAMES G. COOPER: CO-DIRECTOR

COLLEGE OF EDUCATION, UNIVERSITY OF NEW MEXICO

MARCH, 1969

L 001 829

BR-8-0609
PA-24

OE-BR

FINAL REPORT
Project No. 8-0609
Grant No. HEW-OEC-0-080-609-4531 (010)

INTERPRETIVE STUDIES ON BILINGUAL EDUCATION

Horacio Ulibarri
University of New Mexico
College of Education
University Hill N.E.
Albuquerque, New Mexico 87106

March 1969

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

FINAL REPORT
Project No. 8-0609
Grant No. HEW-OEC-0-080-609-4531 (010)

INTERPRETIVE STUDIES ON BILINGUAL EDUCATION

Horacio Ulibarri
University of New Mexico
College of Education
University Hill N.E.
Albuquerque, New Mexico 87106

March 1969

The research reported herein was performed pursuant to a grant with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

TABLE OF CONTENTS

I INTRODUCTION 3

II SUMMARY OF RESEARCH 5

- Purposes of the Bilingual Program 5
- Growth and Development 7
- Language Acquisition and Learning 15
- Programs and Methodology 19
- Projects 23
- Tests and Measurements 33

III IMPLICATIONS FOR EDUCATION 35

- Goals 35
- The Bilingual Education Program 40
- The Teacher and Bilingual Education 43
- Materials 45
- Teacher Methodology 47
- Evaluation 48
- School and Community Relations 50

IV IMPLICATIONS FOR RESEARCH 53

- Goals 53
- The Bilingual Education Program 55
- The Teacher and Bilingual Education 59
- Materials 61
- Teacher Methodology 61
- Evaluation 62
- School and Community Relations 64

ANNOTATED BIBLIOGRAPHY 65

SELECTED BIBLIOGRAPHY 115

PROJECTS AND ON-GOING PROGRAMS 143

I

INTRODUCTION

Bilingual education has been identified as one of the key educational issues of our time. It is significant not only in specific regions of the United States, such as the Southwest, but has reached the national level for consideration. The development of inter-cultural understanding and acceptance is heavily dependent upon linguistic facility for setting up communication systems between ethnic and cultural groups. There are many important groups within and without the ranks of professional education who are seeking ways and means to foment and encourage cross-cultural and cross-ethnic interaction. Many have searched in the research journals, have queried resource persons, and have visited ongoing programs in order to find principles for establishing effective programs. There has not yet been compiled a summary and analysis of research material concerning bilingual education. The project undertook as its major purposes four broad areas:

1. To review the research that has been conducted on bilingual education.
2. To obtain the recommendations on bilingual education from those persons who have been actively engaged in working with this problem.
3. To conduct on-site visitations to see at first hand programs of interest, programs with potential for achieving inter-group reactivity.
4. To draw from the study implications for educational practice and administration, and research in the area of bilingual-bicultural education.

The empirical research was subjected to an analysis according to the following criteria:

1. Internal and external validity of research design.
2. Adequacy of sampling techniques.
3. Reliability and validity of instrumentation.
4. Accuracy of statistical treatments and interpretation.
5. Limitations and generalized ability of the findings.

The on-site visitations examined bilingual projects with respect to conditions contributing to the effectiveness of the program as well as pragmatic factors involved in possible adaptation of such programs to other settings.

The data were compiled and analyzed and resulted in three major presentations which follow subsequently. The first analysis may be of interest to the educated layman, to the interested student, and to the professional scholar of bilingual education. This report summarizes the findings obtained from our three approaches of documentary analysis, consultant reports, and visitations. The implications for education of these data are presented in a separate section. As we examined our data we could not help but be impressed with the many gaps in knowledge regarding bilingualism. Consequently we have presented a section on the need for further research in bilingual education.

A second publication is addressed to the teacher who is faced with the problem of teaching in a bilingual setting. Here we have presented our practical recommendations and suggestions for strengthening classroom approaches for working with the bilingual child.

A third pamphlet is addressed to administrators, school board members, and those who must make policy decisions about bilingual education. We have attempted to present the best thinking from the field on the care and nurture to bilingual programs from an administrator's point-of-view.

The research described above took place during the summer and fall of 1968. The data analysis and the reduction were done primarily during the winter of 1968-69. Whatever the level of success attained by this project was due in large measure to the hard work, the unstinting cooperation of many, many people: graduate students, colleagues, teachers, administrators, citizens, all of these and many others unstintingly gave of their time, their ideas, their reactions. Without this warm cooperation, this friendly participation, this project could not have been completed.

II

SUMMARY OF RESEARCH

This section contains the summary of the literature reviewed. It is divided into:

1. Purposes of the Bilingual Program
2. Growth and Development
3. Language Acquisition and Learning
4. Programs and Methodology
5. Tests and Measurements

1 PURPOSES OF THE BILINGUAL PROGRAM

The term "bilingual" lends itself to many interpretations. On the one hand, bilingualism simply means some functionality in two languages; on the other hand it means a high level of proficiency in two languages and still in another interpretation bilingualism and biculturalism are closely linked together.

The research done has been concerned mostly with the concept of proficiency in another language and little research has been done on bilingualism-biculturalism per se. Because the thrust of this study was bilingual-bicultural education, the more closely related anthropological studies are included as part of the purpose of bilingual programs.

In the Southwest, the region of greatest concern of this study, all the bilinguals are Spanish-speaking or Indians who speak their native dialect as well as English and often also Spanish. Both groups are of a different cultural background than the "run of the mill" Anglo-American culture. Thus, in the Southwest, bilingualism always connotes biculturism.

At the same time one has to realize that bilingual education, except for a few programs, has been peripheral to the overall curriculum and often confined to the second language classes or TESOL. Thus the prevailing objectives of the school program must be taken into consideration in order to glean from that context the purposes of bilingual education. These purposes have to be assessed in terms of the actual practices and not in terms of the "avowed" or "stated" objectives of philosophies of the school programs. The two are very often quite different.

The tacit overriding purpose of the educational programs serving Indian and Mexican-Americans in the Southwest has been acculturation into middle class Anglo-American society of these bilingual, bicultural groups. This purpose, together with the majority-minority accommodation patterns, has produced a thwarted personal image of these people. Thus one sees in most bilingual programs both in statement and in practice an objective such as: "To improve the self-concept of the Mexican-American child." Other objectives, such as to help the child develop better proficiency in the English language, are made in terms of attempting to remedy long existing anomalies in the regular program.

This approach is fine. However, the research is scant and inconclusive as to the impact that this type of objectives can make. Logically it would seem that inclusion of the native culture and language as an integral part of the curriculum would produce beneficial outcomes on the self image of the individual. However, there are extenuating circumstances that could negate these propositions. For example, to have included German and German culture in the curriculum during World War I or Japanese during World War II would have been rather traumatic for the children of German or Japanese descent.

About all that we can say regarding the overall purposes of bilingual education is that at present there are three types of programs:

1. Those programs that initiate instruction in the vernacular and gradually phase out that language as the student becomes proficient in English, the second language.
2. Those programs that teach any or all subject matter in two languages, e.g., Spanish and English. Not only is the subject matter taught in the two languages, but instruction is maintained for both languages throughout the program.
3. Those programs that use two languages as a medium of instruction and also use bicultural elements both in the curriculum content and in the teaching approaches and guidance techniques.

Over and beyond these over-all objectives, such statements as the following can be found in relation to the purposes of the bilingual programs:

1. The bilingual learner will become more proficient both in his own language as well as the second language which is English.
2. The learner's achievement and aspiration levels will be raised.
3. The learner will develop pride in his cultural heritage.
4. The learner's self-concept will be positively developed and reinforced.

Obviously when the impact of objectives such as these stated above have not been clearly evaluated, the curriculum developers must take these to be in the nature of hypotheses. They represent good theory but that is all they are.

The very obvious implication for bilingual education is that it should open its doors to research and evaluation. There are too many facets in bilingual education that are relatively unknown; some of them are as yet not even couched in good theory. To embark on a course of action just because it seems logical is to commit the age-old sin of educational practice with the possibility of bringing about the same disastrous effects.

2. GROWTH AND DEVELOPMENT

1.0 Introduction

In the early days of investigating the bilingual child, it was found that the bilingual child tended to be inferior in most variables, for example, intelligence, academic achievement, when compared to the English-speaking child. These discrepancies in favor of the English-speaking child were generally explained in terms of language differences. In any attempt to analyze today the growth and development, a person must of necessity take into consideration the fact that the overwhelming majority of the bilinguals in this country are members of some minority group. Perhaps this factor more than bilingualism or biculturalism accounts for the stunted growth that is apparent among minority group members. This can be explained by the fact that the minority group members as a whole have less accessibility:

1. to the economic base of the nation
2. to the social life of the American people
3. to the educational opportunities of the schools

However, because of the overwhelming interdependency of American society, no social group can live in isolation. Since the Anglo-American culture is predominant in the United States, all minority groups for survival purposes must function to some degree within the Anglo-American socio-cultural milieu. This is forced conformity. (Ulibarri) The majority group has within its domain the power to state certain norms for the minority group and to force them into certain types of behavior according to the pre-set norms. The fact that the minority group member is operating out of his element of necessity behaves most of the time in an inferior manner. At this point the majority group withholds rewards from the minority group and intensifies the acculturation efforts.

The net result generally tends to be that the minority group members which in the Southwest are bilingual groups, i.e., the Indians and the Mexican-Americans, are relegated a lower status, and are destined to poorer conditions and standards of living than the majority group member. This poverty springs the downward spiral of bad education, bad health, less energy, less functionality within the Anglo-American culture, and thus more destitution. As a result we find today that the Indian-American and the Mexican-American which are the target groups of this bilingual study as a whole are impoverished and with rather low educational attainment levels.

What does this forced conformity, what does the characteristic of being poor, do to a group of people? No comprehensive study has been made that could give us substantive answers to these questions as they relate to the Indian and Mexican-American in the Southwest. More attention has been given to the developmental problems of the poor and in recent years to the war on poverty. No scientifically designed investigation has been undertaken to determine the areas of strength and weaknesses among the bilingual and bicultural.

2.0 Summary

This section on growth and development is divided into physical growth, mental growth, academic growth, and socio-cultural growth.

2.1 Physical Growth

Regarding physical growth, health and sickness, there has been no widespread research that has attempted to assess the physical status of the bilingual minority group member, especially as it applies to bilingual education. What little we know about this area has been from studies that have been made of small groups and projects such as OEO projects, e.g. Head Start and also Medicare. The general consensus of these studies has been that the bilingual in no respect is different from any other group in physical stamina and physical health. What has to be considered is the relative social class status of the individual. This becomes a crucial factor in the area of bilingual education since the majority of the bilingual people are minority group members who are characterized by poverty-stricken living conditions. (Mexican-American Study) More recently the task force for OEO has indicated that there is strong evidence that mental growth is affected and arrested by dietary and nutritional deficiencies during the pregnancy period and especially during the first six months of life of the infant. If these studies are correct in their assessment, it is a frightful consequence that we have to face if poverty is not eradicated from the life of the bilingual bicultural individual. This means that it is possible to have generation after generation of impoverished slow learners among the bilingual bicultural of the Southwest.

2.2 Mental Growth

The overwhelming evidence of the research dealing with intellectual growth of the bilingual is that the bilinguals score at much lower levels than the norming group. No research evidence was uncovered where an attempt was made by some form of treatment to increase the intelligence quotient of the bilingual, except one made by Sanchez. (Sanchez) This phenomenon of the bilingual student generally scoring lower than the English-speaking monoglot will be discussed at length in the section dealing with Testing and Measurements.

Regarding the self-concept of the individual, the evidence shows that the bilingual bicultural individual tends to be more defensive, filled with more anxiety, and is more alienated than the English-speaking Anglo-American. (Palomares, Ulibarri) The reason for this syndrome is not necessarily attributed to bilingualism, however. Although bilingualism may be a contributing factor, it is surmised that the strongest factor is the fact that most bilinguals are minority group members with all the attendant anomolies.

Besides this defensive syndrome, the bilingual-bicultural individuals tend to experience some confusion and frustration as they move from the native cultural setting into the school setting. (Christian) This is directly attributed to the lack of facility in the English language and to differences in the cultural setting, especially the differences in the value systems of both settings. Some of the Spanish-speaking bilinguals feel within themselves the need of improving human relationships, the finding of a job, getting an education, having vocational guidance, and learning more about the customs of this country. This study was done among the Puerto Rican students. Teachers of the Puerto Ricans definitely feel that they need to improve speech, reading, writing, and arithmetic as competencies among their students. (Stambler)

Probably the most damaging thing to the self-concept of the bilingual has been the widespread practice in the Southwest of prohibiting Spanish-speaking students to speak their native dialect within the school grounds and within the classroom. This has been done in the name of teaching these students to speak in English and to reinforce their learning of English. The results have been generally that the students soon learn that Spanish is the language of deviancy and that to be a Spanish-speaker is to be by that very fact an object of differentiated treatment. (Ulibarri) This coupled with the fact that there is a constant influx of lower class Mexicans in the southwestern part of the United States has perpetuated the image of the Mexican being an illiterate, lazy, impoverished individual who is a welfare case on the rest of society or is on the borderline. (Mexican-American Study) In general, this same pattern has existed in the treatment of the Indians by the Bureau of Indian Affairs Schools. There is some evidence that the inclusion of Spanish as a vehicle for teaching both subject matter and cultural factors in a regular school curriculum enhances the development of a positive self-image.

2.3 Academic Growth

The research literature is in consensus that the bilingual child generally achieves at a lower level and gains at a slower rate than the Anglo-American, English-speaking child in all areas of the curriculum when the instruction is done all in English. When the instruction is done bilingually, there is a definite gain in language acquisition in both languages by the bilingual. In one study, the bilingual students showed less gain in subject matter areas when compared to students who were not participating in the bilingual program, but were significantly higher in language acquisition. (San Antonio Study)

The above findings very definitely apply to the Mexican-Americans. The Indian groups have been studied and have been found to be very deficient in achievement levels. (Anderson) A conclusion that was drawn in one study was that the Indian students who are attending off-reservation public schools did better than the ones that attended on-reservation public schools. The students that attended Bureau of Indian Affairs off-reservation schools generally did better than students who attended on-reservation BIA schools. (Coombs)

Among the reasons given for this lower achievement has been language interference. (Rohn) Generally it has been conceded that the bilingual student because of his lack of proficiency in the English language understands less of the teaching in the classroom because it is so highly verbalized. Even in the reading program, when the idiomatic expressions have been isolated from the basal readers, it has been found that there is a tremendously significant difference between the lack of understanding of the Navajo and Spanish-speaking children with the assumed level of language competency of the basal readers at the fourth, fifth, and sixth grade levels. (Yandell, Dudding) It has been found that the Spanish-speaking students do better in achievement tests in the areas of computation or memorization such as arithmetic computation and spelling than they do in the more verbal subjects such as the language battery, social studies battery, and even the science battery. (Zintz)

Another factor that has been alluded to in the research are elements not directly evident within the school. (Michael, Caplan & Ruble) These elements have to do with the home and community environment in which the child exists. The educational-linguistic background of the parents has been found to have correlations with the achievement of the children in the school. Generally the more acculturated the parents are, the better they speak the English language, the higher the achievement that the children have in school. Generally it is argued that the more acculturated the child is, the better he will be able to achieve in school. These are speculations found in no type of research. However, one study points out that forced acculturation may well have very negative reactions. (Zintz)

There is a general agreement in the studies that have been concerned with cultural variables as related to school achievement that cultural conflicts have a direct relationship with the educational retardation of the children. (Bergan) This has been found in the area of science, in the area of learning English analogies, in the area of reading, and in the area of arithmetic. (Hess, Charles, Ikeda, Condie) None of these studies, however, have delineated specifically which are the cultural conflicts that intervene in the learning process. Two studies attribute the cultural norm of conformity and cooperation on the part of Indian children as being the main causative factor of educational retardation on the part of the children. (Zojonc, Havighurst)

Some studies have been made where the lack of teacher awareness regarding the socio-culture of the bilingual has been attributed to be the main factor in the educational retardation of the Mexican-American and the Indian-American. (Ulibarri, Caplan & Ruble) These studies attribute that because the teachers and administrators are unaware of socio-cultural differences, the school curriculum tends to be middle-class WASP oriented. Because of this lack of awareness and because of the schools being middle-class oriented, the bilingual child tends to feel out of place in the school socio-culture, and these negative attitudes lead to isolation, defensiveness, and anxiety on the part of the bilingual child, all of which definitely have a bearing on his achievement in school. The teachers, being unaware of this chasm between the socio-culture of the school and the socio-cultural backgrounds of the children, inflict further wounds by causing cultural conflict in their teaching approaches and techniques. (Ulibarri, Cordova)

All the testing done in the area of educational gain among the bilingual children have attested to the fact that generally bilingual children score between two to three grades behind their English-speaking counterparts. (Montez) All of the studies have tried to explain the lack of educational gain among the bilingual in the terms described above, such as lack of experiential background, factors of acculturation, lack of teacher awareness of socio-cultural differences, the attitude of the children, the culture conflict. No study was found which attempts to measure the reliability and validity of achievement tests on the market today when applied to bilingual-bicultural children, especially the children who come from impoverished areas.

2.4 Socio-Cultural Growth

The study of acculturation as such was not undertaken by this study because the studies on acculturation that have been made were not directly related to bilingual education. Nonetheless it must be understood that acculturation is a factor that must be considered and included in the bilingual-bicultural program. Acculturation is a necessary process for all minority group members. Acculturation, because it was often mistaken for assimilation and amalgamation, has been viewed as the destruction of any minority culture. Viewed from a bicultural perspective, it becomes a harmonious and controlled interaction between two cultures. (Christian) The acculturation process directly affects the personality. (Bossard) Forced acculturation can cause conflicts, unacceptable reactions, and increased resistance. (Zintz) Minority groups often combine to preserve traditions and to resist forced change. (Burma) This combination extends beyond the family and the community into education.

There are several accompanying phenomena which affect the personality of the individual who is involved in the process of acculturation. In one of the first studies of acculturation, the process is described in terms of diffusion, assimilation, acceptance, adaptation, and reaction.

Diffusion is the aspect of cultural change which includes the transmission of techniques, attitudes, and concepts from one cultural group to another. This change can be a two-way process, however. The dominant culture usually undergoes less change, with more selectivity than the minority group culture. Assimilation is used to designate the process by which culture achieves synthesis. In other words, when a value has been assimilated, it becomes a functional part of the belief system. It is taught through the culture's own process and it is enforced by the mechanism of social control. Acceptance occurs when the members of the minority culture lose most of the values and practices of the old culture and acquire the inner values and behavioral patterns of the culture with which the group has come into contact. Adaptation is a condition where original and foreign cultural traits are combined to produce a smoothly functional cultural whole. It is achieved with modification of the patterns of the two cultures. There may be the retention of a series of conflicting attitudes and values which are reconciled in everyday life as special occasions arise. Reaction occurs because of oppression or because of unforseen consequences of acceptance of foreign culture traits.

Contra-acculturation movements develop and the reaction may maintain its psychological force: (1) as a compensation for the imposed or assumed inferiority, or (2) through the prestige which a return to the pre-acculturative conditions may bring to the group participating in such a movement.

Acculturation is more selective for the adult individual than for the child. (Mead) The adult can select from the culture that that has resemblances to the familiar and add to his store of new learnings as they are needed. In general, the adult can retain his identity in his own ethnic and cultural cluster, but to the child who is still in the process of learning the social roles, the decision creates much more stress. He is caught between the culture of his parents and that of the school as well as that of the rest of the community. Thus, he is forever being forced to choose between conflicting sets of values, being rewarded or punished alternately or simultaneously by the conflicting culture systems. Cultural disruption is a common result of contact by one cultural group with another. Sometimes acculturation encourages positive changes in one or both cultural groups. The most common pattern has been one of cultural disruption, however, for the minority culture. (Ulibarri)

The problems of acculturation of the Mexican-Americans and the Indian-Americans have been extensively studied and the conclusions arrived at are that much personal disorganization takes place because of the disfunctions between the two socio-cultural systems. (Ulibarri) For example, the question of time orientation is perhaps the most widely known, where the Anglo-American wants the individual to be oriented towards the future while the Mexican-American and the Indian-American prefer to be oriented toward the present. (Spang)

Some of the conclusions that have been arrived at through the research on acculturation have been the following:

1. Indians have tended to resist acculturation more than any other ethnic group. (Spang)
2. The Spanish-Americans can be found on a continuum of acculturation from very little acculturation to very high acculturation. (Shasteen)
3. Acculturation of the Mexican-American takes the form of a broken profile where they are very acculturated in some areas and relatively unacculturated in others. (Shasteen)
4. Acculturation is greater among the Mexican-Americans in the middle class ranks than in the lower classes. (Shasteen, Ulibarri)
5. Acculturation has little or no correlation to school achievement. (Cordova, Simirenko)
6. Acculturation has significant correlation to alienation when family and powerlessness are related. (Cordova)
7. Attempts at preserving the cultural entity have been undertaken by power movements.
8. The ultimate goal of acculturation can be biculturism. (Ulibarri, Bossard)

9. Ethnic factors have decidedly biased the judgment of the adolescent toward community attitudes. (Peck)
10. Most studies have concluded that the problems affecting the bilingual-bicultural groups of the Southwest can be best solved by complete acculturation.
11. There is a dissident view, however, that biculturism is the ultimate goal. (Knowlton)
12. The amount of formal education alters the perception of the individual toward American society. The more formal education the individuals have the more positive the attitudes and orientations tend to be toward the American culture. (Barbosa-DaSilva)
13. Also, the more acculturated the parents are, the more they want their children to join the mainstream of society. (Bernardoni)
14. Lower class Mexicans and Mexican-Americans exhibit ethno-centric tendencies. (Ulibarri)
15. A profound knowledge or no knowledge of the Anglo culture yielded the least cultural prejudices in a study where the attitudes of bilingual male students toward the Anglo ethnic group were measured. (Johnson)
16. Mobility of the Indian population, impeded by illiteracy, language difficulties, and lack of technical skills seem to be the reasons for the failure to acculturate the Indian. (Adams)

3. LANGUAGE ACQUISITION AND LEARNING

1.0 Theoretical Linguistics

The task of theoretical linguistics is to explain the nature of language as a system. All activities of linguists will be based on their theory of language. The last decade has been marked by an increasing formalization of linguistic theory as well as by a major change in the nature of the theory. (Langacker, Shane)

1.1 The Nature of Language

Language is an abstract system of rules used by human beings for communication. It is not writing alone, for millions of illiterates use it; it is not speech alone, for people who are deaf and dumb use it.

Recent linguistic work concentrates on the notion that language is creative, that is, that the most important property of language is that its users can make up and understand utterances that they have never come across before. To explain this, it is necessary to propose an elaborate system of abstract rules that any speaker of a language develops as he acquires the language. These rules are believed to fall into three components: semantic, syntactic, and phonological. (Chomsky)

1.2 Language Acquisition

The acquisition of the rules depends on two things: a human learner, and exposure to a language. Every normal human being acquires a language, and he acquires the language he is exposed to. The ability to acquire a language is innate: the actual language learning depends on environment. (Lennenberg)

1.3 Language Description

All human languages have structure. There are universal properties (for language is innate) but individual differences. A language may be described and language description is a central task of the linguist. The job is an enormous one. No one has yet succeeded in describing any human language with anything remotely approaching completeness, but this has not prevented children learning those languages. A language description is called a grammar. (Chomsky, Thomas)

1.31 Semantics

The semantic component of a grammar is that part concerned with explaining how sentences have meaning. The meaning of a sentence is made up of the naming of its parts (words, phrases, etc.) and the way in which they are combined. Studies of the meaning systems of various languages show that while the processes are similar, the way in which a given language labels the reality around it differs from the way in which another language does so. For example in English we use the word "head" when Spanish would use:

cabeza	(head of a person)
cabecera	(head of a bed)
cara	("heads" on a coin)
cabeza del fosforo	(head of a match)
director	(head of an organization)

1.32 Syntax

Syntax is the central component of a grammar. It relates the meaning (content) to the external form (expression). There are a number of basic relationships common to all languages. In all languages it is possible to point out the relationship of function. One function is subject of a sentence. A second relationship is transformation, for example, the relation between an active and passive sentence. A third relationship is agreement: the relationship between the English words this, these and the noun that follows, such as this book, or these books.

Syntax is represented in the surface level by a number of structural devices: function words (a, the, to, etc.); word endings (like, liked, liking, etc.); word order (John likes Jill, Jill likes John); and changes in intonation and punctuation (You like her. You like her?). There are more basic processes involved, including ordering, substitution, deletion, and expansion.(Jacobs, Langacker, Thomas)

1.33 Phonology

The third component of the grammar is the phonology, or the sound system. In earlier work in linguistics, the task of phonology was conceived as discovering and listing the significant units of the system, called phonemes. In current work, emphasis is being placed on the establishment of rules going from the underlying representation of sentences to their surface phonetic shape. (Stockwell)

1.4 Contrastive Linguistics

The comparison of descriptive statements about two languages is helpful in giving some explanation of mistakes that speakers of one language make when learning the second, or in suggesting tactics that might be tried in presenting problem areas. (Stockwell)

2.0 Psycholinguistics

Psycholinguistics is concerned with the psychology of language. Two areas of special relevance to linguistics are studies of language acquisition and studies of language and cognition. (Saporta)

2.1 Psycholinguistic Studies of Language Acquisition

Recent studies of how children acquire their first language have provided empirical support for the hypothesis that it is a matter of developing rules, similar to those referred to above, rather than forming "habits" or "generalizing." As these studies are extended to different cultures and languages, it will be possible to test assumptions about the understanding of the process. The same methods applied to the acquisition of second languages will be of extreme importance to language pedagogy. (Lennenberg)

2.2 Language and Cognition

The relation between language and cognition, that is between the system the speakers of a language use for labelling their perceptions and the way in which they understand the outside world, is a problem widely debated. Comparison of two languages makes clear the differences of the ways in which they classify the outside world. A widely quoted example is the difference in color-name systems that are to be found. No empirical evidence has been compiled to support the hypothesis that this difference in language leads to any basic differences in cognitive function or cognitive ability. (Lennenberg)

3.0 Socio-linguistics

Socio-linguistics is a new field which in the last decade or so has started to throw some important light on the relation between language and society. (Shuy)

3.1 Multilingual Societies

Studies have shown the complexities possible in societies in which more than one language exist. Each of the languages concerned will have a different number of speakers, a different status, a different function, but these three will not necessarily be related. In Quebec, for instance, although the majority of the people speak French, and French is used for public or cultural media (newspapers, education, religion) as well as private function (home, family), English has been the status language. (Bright, Fishman, Jacobs, Lieberson)

3.2 Multilingual Individuals

An individual's language use is very complex. In a multilingual society, it is not unusual to find a man who speaks language "A" with his parents, language "B" with his wife and children, language "C" at work, and language "D" in his dealings with the government. In each of his roles, he chooses the appropriate language, and chooses cultural and other attitudes that go along with the language. (Bright, Fishman, Jacobs, Lieberson)

4. PROGRAMS AND METHODOLOGY

1.0 Introduction

Bilingual education theory, scant as it is, has considered cultural factors in the learning process of the bilingual student. For example, a low self-image and the lack of willingness and ability to compete are some of the factors that have been emphasized in setting up objectives for bilingual education. Bilingual education has been stated in terms of emphasizing approaches which minimize competition and emphasize bicultural guidance. Still another objective emphasized is that of developing a better self-image through more cultural awareness on the part of the bilingual student. However, most of the theory has yet to be implemented. In general the materials that are being used in the bilingual programs tend to be translations of the English materials and the methodology does not differ significantly from the methodology used in the monolingual regular program of the school.

As far as we have been able to assess, few groups of teachers have received specialized training for bilingual education. Much of what passes for specialized training actually is more methodology of the type given in the average preparation in teacher training programs. Some of the specialization that is given the prospective bilingual education teachers tends to run along the lines of sensitizing the teachers in the area of socio-cultural factors. However, real innovation from the traditional trends of the regular program has not been observed.

One possible exception would be the specialized training that teachers have received in the area of teaching English as a second language. These institutes have been prevalent in the past five years. However, it must be emphasized that teaching English as second language is not bilingual education. TESOL is not a curriculum. TESOL is only a means of getting the bilingual child functioning in the English language. TESOL has specialized methodology and a fast-growing body of theory behind it. Some of it definitely is applicable to the bilingual education program. Certainly, for example, the audio-lingual techniques of TESOL are applicable to the teaching of Spanish as a second language as well as to the teaching of any other second language.

2.0 Summary

Very few bilingual programs are in existence today that are an integral part of the curriculum. Most of the literature reviewed indicated that bilingual education tended to be at the periphery of the curriculum. There were some specialized programs reviewed but these programs tended to be specialized projects and not a part of the regular curriculum. Among the specialized projects in the area of bilingual education were:

A science project designed to foster bilingualism, forestall anticipated difficulties, and provide motivation as well as providing for the course requirements in this particular school.

Two seventh grade classes of similar age, background and abilities were given the same program in all respects except three: the experimental group received their instruction in Spanish and were given an additional course in the Spanish language. The two groups were measured for progress in Spanish, science, English, and student attitudes. The results indicated an improvement in Spanish and science by those who received the instruction in Spanish. (Loretan)

Another project was an experiment attempting to teach two languages in two culturally distinctive contexts to find out if separate cultural learning enhances the learner's ability to use one language and then the other. The results were that if the bilingual has learned the two languages in culturally distinct context, the differences in meaning when translated from one language to another are increased. (Lambert)

A two-year experimental program was conducted to develop bilingual readiness in kindergarten and first grade. The group was composed of Negro, Spanish-speaking and "other children." When several factors were held constant, the Spanish-speaking children gained more self-confidence and cultural awareness. There was also greater acceptance by the children and their parents of second language learning. (Finocchiaro)

An experiment carried on with Guamanian first graders attempted to find out if the postponement of formal reading in favor of an oral reading-readiness approach resulted in higher gains when considered over a four-year period. The results were that at the end of the first year the group excelled in ability to speak English. At the end of three years all groups were equal in their ability to comprehend oral English. At the end of the four years, the control group showed a small but significant lead in the ability to read as measured by the California Reading Test. The results were inconclusive. (Cooper)

The Spanish language and the Mexican and Spanish culture have been taught in this particular system for a long period of time. The emphasis has been on oral development but some reading and writing is done in the fourth and fifth grades. The teaching units are designed to motivate and create interest. They include such activities as Home-Community Life, Transportation, Communication, School Activities, Health, and Safety. (Rivera)

Much of the attempts at specializing for curriculum for the teaching of bilingual students has centered around the area of language development and reading. One of the experiments attempted to assess the effect of teaching Spanish-speaking children to read in Spanish when they were retarded in the reading of English. The two groups received equivalent instruction in English, but the experimental group was also taught directly to read in Spanish. There was no reliable evidence of interference between the two languages at either school. The results were that greater reading ability in Spanish resulted more from direct instruction in reading in Spanish than unplanned transfer from English alone. Tentatively also, it was

> concluded that there was some value in planned transfer from learning in Spanish to English in the improvement in reading abilities of Spanish-English bilinguals. (Kaufman)
>
> A program to develop oral language skills to reinforce traditional cultural values of the Spanish-American produced reassuring results as of the interim report of 1966. The recommendation made then was that there should be an emphasis on parent participation, individualized instruction, self-instruction and cultural awareness on the part of the children in order to attain satisfactory academic progress and to develop their sense of self-identity and self-esteem. (Amsden)

There have been several other studies made in the area of reading which have included linguistics approaches to the teaching of reading, (Condie); studies in the area of science, (Charles); studies in the area of arithmetic, (Ikeda). Some have been in the area of music. (Blickenstaff, Feuerlicht.) Another study indicates that the extensive use of field trips to build experiential background and knowledge results in strong student visual acuity and auditory perception. Also in this same study language pattern facilities seem to have improved and the children appeared to have developed a sense of curiosity and definitely were more expressive in the oral language. (Compensatory Education Project)

Several TESOL materials have been developed in program form, for example, English 900, American English Series, The Miami Linguistic Readers, and several supplementary materials in the teaching of second language.

Relatively little bicultural material has been developed with the exception of an innovative program in the Rough Rock School Project. In this project, Navajo is used right along with English in the teaching of Navajo cultural traditions and value systems.

There have been several departures in the traditional guidance programs for bilingual students. A project called "Student Motivation Program" in the Denver schools has been organized for the explicit purpose of attempting to motivate the students into finishing their high school and enrolling at the University level. Several types of activities are carried on, some of them social in nature, some of them in the area of public relations, and others in community action endeavors. The result is that the rapport has been developing whereby the students, besides auto-motivating themselves, are also talking out their problems with one another and with their teacher-sponsors. Relatively good results are occurring in that the students are beginning to be able to see the nature of their problems and attempting to find solutions to them.

Another project has hired a Mexican who has been naturalized and serves in the capacity of group counselors. As the students coming in from Mexico enroll in this particular school, they are given a series of informal lectures comparing the value systems of the American society with that of the Mexican society, given many "dos and don'ts" regarding their school behavior, and their behavior in the community as well. At the same time they have the opportunity of asking questions and discussing their personal problems. Along with this they are introduced to an intensive English as second-language program and as soon as possible are placed into the regular classrooms. All along, they come back from the classroom into the second-language teaching as their needs demand as well as into informal consultation with the group guidance counselor. The result has been that the dropout rates have decreased significantly in the past few years. Several other attempts at motivation and guidance of Mexican-American students implementing the Spanish language either on a formal basis or on a loose and permissive atmosphere.

The following section contains a description of the on-going programs that were either visited or literature was received from them.

WASCO PROJECT
Bakersfield, California

The Wasco Union School District has developed a Gestalt approach to the problem of bilingualism and biculturalism. This project attempts to create a total environment which will develop the resources of the Spanish-speaking bilingual from kindergarten through high school. In addition, the program works for behavior changes through planned educational experiences in those students not of Mexican descent.

A summary of objectives include:

1. The student will become involved in vocational explorations in order to internalize his vocational goals. This involves identification of vocational fields and their specific requirements, ability to relate steps necessary for obtaining the chosen field, parental support of the student's vocational choice, and a favorable image of that area gained through contact with successful people in the student's chosen field.

2. In order to increase perceptual-motor skills, the student should be able to perform eye-motor coordination tasks and figure ground tasks, recognize geometric figures, and discriminate rotations and reversals of figures at the appropriate age level as defined by Dr. Frostig.

3. The student will develop perceptual-motor skills in the home environment through the use of work and play objects. Home visits to explain the use of and to demonstrate these objects will be made. Materials are available for student use.

4. The student should be able to verbalize how he feels about himself and discuss social problems with his peers so that he may develop self awareness and socializing skills.

5. The student will discuss the cultural background of Mexico, verbalize the influences of Mexico upon the United States' culture, and recognize Mexican music; thus, he will be provided materials to recognize his culture and historical heritage.

6. The Spanish-speaking student will readily speak his native tongue in specific classroom situations and be able to tell why his bilingual ability is an asset; this will provide an opportunity for a liberal use of Spanish which will perpetuate feelings of pride.

7. The student will function as an interpreter of the school's goals and be given decision-making opportunities to capitalize upon his social strength.

8. Because the curriculum will be geared to the bilingual's experiential base, he will show normal progress according to his individual learning profile.

9. Through the addition of specific vocabulary and information building programs, the bilingual will perform at least five months above his vocabulary and information score on the WISC or WAIS given at the beginning of the project.

This exemplary program attempts to incorporate into one comprehensive curriculum many components which are used by various schools. Elementary children attend daily classes in English as a second language, group counseling, bicultural understanding, and perceptual-motor development in addition to regular classroom activities. Junior high school students attend daily classes in language development. All students beyond the fifth grade attend weekly classes in exploration of biculturalism, self-development, and vocational areas. Also in use are special approaches aimed at involving parents, community, and the dominant peer group.

Special materials used for the English as a second language class include the University at Los Angeles "200" series, the English for Today series by the National Council for Teachers of English, Fries series (revised), the English "900" series, and the Miami Linguistic series. Materials in the areas of bicultural exploration have been developed by the staff. Group interaction and counseling will aid in exploration of self. Perceptual development will be taught through Dr. Marion Frostig materials and Gessell maturation materials. The seminar in vocation exploration will depend mostly upon human resources. Sullivan and Associates programmed materials, SRA kits, Houghton-Mifflin materials, Reader's Digest Skill Builders, and the Imperial primary reading program will be used in language development classes.

Further information may be obtained from

Director of Curricular Services
Kern County Superintendent
Kern County Civic Center
1415 Truxtun Avenue
Bakersfield, California 93301

BILINGUAL EDUCATION
Calexico, California

The Calexico Unified School District is currently operating a comprehensive bilingual program for students at the elementary and junior high levels. Objectives of the program are:

1. The student will develop English language skills comparable to those of native Americans.
2. The student will develop and maintain study skills.
3. The student will avoid becoming academically retarded through the teaching of skills and content subjects in his native language; this will permit the student's proficiency to determine the time when he will transfer to English as the language of instruction.
4. The student will develop feelings of accomplishment and satisfaction in the academic climate.
5. The student will identify with and become an integral part of the participating student body.
6. The student will understand and become proud of the Spanish heritage as well as the American culture.

Elementary pupils, selected on the basis of facility in English, are assigned to a daily thirty minute pre-school program aimed at developing fluency in aural-oral English. All pupils study Spanish beginning in second grade and continuing through grade six. Teachers and aides are bilingual. Junior high instruction is in Spanish for English, social studies, and Spanish (four periods each day.).

Standard United States textbooks are used in their Spanish editions. Many materials are by Ginn, Prentice-Hall, and D. C. Heath. Some developmental work is under way to provide junior high school level material in geography presented in Spanish.

Further information may be obtained from:

Superintendent
Calexico Unified School District
P. O. Box 792
Calexico, California 92231

HARLANDALE PROJECT
San Antonio, Texas

A bilingual instructional project is currently being conducted in the first and second grades of four elementary schools in the Harlandale Independent School District in San Antonio, Texas. Objectives are:

1. The bilingual child will develop cognitive and language abilities through a bilingual environment and instruction.

2. The child will have an improved self-concept due to personal and cultural acceptance; these will make possible a psychological motivation which will insure linguistic and communicative successes.

The program is multivaried. It ranges from completely Spanish instruction in some first grades and ends with very little bilingual instruction at the end of the second grade. Recent evaluation has indicated that pupils do not read better or worse in English as a result of the program. However, teacher observations have suggested that the Spanish-speaking students seem to have a better self concept, more pride in their heritage, and, generally, feel more accepted. Additional information may be obtained from

Director
Project Teacher Excellence
Our Lady of the Lake College
San Antonio, Texas 78207

PROJECT PASO
Gilroy, California

Project Paso has been instituted in Gilroy, California to aid the Spanish-speaking bilingual at the high school level. Objectives include:

1. The student will learn facts and procedures necessary for school functioning--i.e. attendance rules, office locations, and identification of personnel.

2. The student will learn key concepts and principles in standard subject areas at the appropriate age/grade level; this will be measured through a minimal eighty per cent correct scores on teacher-made tests.

3. The student will be assimilated into student school life through his understanding of the need for rules and regulations, attending and participating in extra curricular activities, and establishing a "big brother" relationship with Anglo counterparts.

4. The student will develop proficiency in the English language that will enable effective functioning in a full English curriculum within two years of entry.

5. The student will maintain a positive self concept through voluntary competition in areas not requiring English language facility.

Non-English and poor English speaking students are identified and tested. Classes offer English as a second language and bilingual instruction. Spanish instruction is given in social studies, mathematics, and science for a two-year period. This program also includes teacher awareness programs and community conferences. Advanced Anglo students in Spanish classes will participate as teaching assistants.

Special materials include books printed in Spanish for use in standard subject areas, supplementary books in Spanish, and books in English capable of providing the transition from Spanish to English. The school district is printing many of their own units.

Additional information may be obtained from

Project Director
Special Instructional Program
Gilroy Unified School District
263 North Church Street
Gilroy, California 95020

THE GOOD SAMARITAN CENTER
San Antonio, Texas

The Good Samaritan Center in San Antonio has developed a pre-school program for disadvantaged Spanish-speaking children. Working under the premise that language deprivation causes many more handicaps, the project attempts to remedy these deficiencies through development of language and communication skills. Objectives gleaned from an interim report include:

1. The bilingual child will be able to cope with his environment in either language.

2. The child will gain in perceptual skills.

3. The student will develop many channels of communication through a multisensory approach to language learning.

4. The child will gain a larger fund of information in both languages through exposure to new vocabulary, concepts, and experiences which will have meaning in future learning tasks.

The three-year-old enters the classroom in which a bilingual teacher instructs in Spanish eighty percent of the time. Four and five year olds advance to classrooms with English-speaking teachers and bilingual aides. Students attend classes for a total of three hours per day. Special attention is given to increasing attention span, working independently, using adults as reinforcement agents, persisting in work attitudes, increasing desire to achieve, nurturing a positive self concept, and increasing exploratory behavior. The program works extensively with parents to modify behavior through education. Also, teachers attend many in-service training workshops. Most materials have been specially developed. The project received a grant for the production of four filmstrips, the first of which was available in the spring of 1968.

For further information, contact:

Director
The Good Samaritan Center
1600 Saltillo Street
San Antonio, Texas 78207

STOCKTON PROJECT
Stockton, California

The Stockton Unified School District in California is currently operating a demonstration project which hopes to determine the advantage of a comprehensive instruction program which meets the educational needs of Spanish-speaking and other ethnic minority groups through bilingual - bicultural curriculum development. Program objectives include:

1. The project will be a totally bilingual school and exemplary demonstration and training center.

2. The program will include a community development phase.

3. Through integration and interaction of the community, the project will promote better understanding among people of different cultural backgrounds.

4. The project will include an adult education program.

The first phase of the program is aimed at first and second grades. In subsequent phases more grades will become involved until the entire school is included. Instruction in each subject is given in Spanish with equal time allotments in English instruction. The curriculum attempts to provide concrete experiences and their accompanying language symbolizations. Self concept building exercises are a part of the curriculum.

The Ott materials are used in teaching science and social studies. Language acquisition is implemented through specially developed games, rhymes, and exercises. Pupil progress will be evaluated through experience charts and other translative forms. Many materials are being specially developed.

Additional information is available from:

Bilingual Project Director
701 N. Madison Street
Stockton Unified School District
Stockton, California 95202

PASSAIC PROJECT
Passaic, New Jersey

A bilingual program has been newly established at the Passaic Public Schools in New Jersey with the ultimate goal of assimilating elementary Puerto Rican children into the American culture. The major objectives of the program are:

1. The primary non-English child will have greater opportunity for oral communication related to his ability to assimilate while gaining English.

2. The intermediate grade bilingual will gain sufficient knowledge in standard subject areas taught in Spanish to ease his assimilation of English.

Puerto Rican children spend half a day with a bilingual instructor speaking Spanish. During this time, they receive Spanish instruction in different subjects and English as a second language. The second half of the day is spent in regular classes with American children. The program is relatively flexible and allows the teacher freedom in determining materials and approaches. The child receives a non-graded report for parental review in addition to his regular report card. Also, school staff visit homes and provide social services. The school is producing many of their own units. Further information may be obtained from:

Dr. Carmen N. Marina
Head Biligual Teacher
Passaic Public Schools
Passaic, New Jersey

NEW YORK RESEARCH PROJECT
New York, New York

A bilingual program in science and Spanish for Spanish-speaking students from grades seven through nine has been underway in the New York City schools. The purposes and objectives of the experimental program were:

1. The student's knowledge of the Spanish language and culture will be increased through classes taught in Spanish.

2. The student's knowledge of English will be increased.

3. The student will know more science through having been taught bilingually.

4. The student's self image, morale, and aspirations will be raised through a nurturation of pride in his Spanish origins.

5. The student will appreciate that the American culture does not require cultural uniformity.

Bilingual teachers and licensed laboratory assistants taught informal science classes which stressed the underlying concepts and interrelationships of chemistry, physics, biology, and the earth sciences. Where teachers were inadequate in their ability to speak Spanish, fluent Spanish-speaking coordinators interpreted. All experimental students received instruction in formal Spanish. Students received English science textbooks, work sheets, and vocabulary sheets and equivalent content material in Spanish. Spanish reference books from Spain and Argentina, science texts purchased from the Puerto Rico Office of Education, and bilingual dictionaries were used. Student achievement was evident in science and Spanish. Those who were bilingually taught excelled in learning Spanish. Teacher evaluations indicated that the bilingually taught students evidenced more effort and reliability.

Additional information is available from:

Board of Education of the City of New York
Bureau of Educational Research
110 Livingston Street
Brooklyn, New York 11201

SAN ANTONIO BILINGUAL RESEARCH PROJECT
Austin, Texas

The San Antonio Project, instituted in 1964, is majorally concerned with language development of the Mexican-American child at the elementary level. The major objective of the program has been to improve the learning potential and the self concept of disadvantaged Mexican-American children through improvement of their oral language. Primary to this objective is the approach that the student must recognize the relationship between meanings and linguistic symbols necessary for expression of such meanings. The problem has been attacked within the content areas of science and social studies. The linguistic approach is augmented by the "discovery" technique which meaningfully establishes the concepts contained in the curriculums. Underlying justifications for two teaching styles are:

1. The child will think independently in the new language while following such procedures as observing, categorizing, and generalizing.

2. The child will be encouraged to exhibit natural problem-solving abilities.

As the child progresses, the language program becomes more structured. The eventual goal is habituation of the new language patterns. Original treatments were an oral-aural English approach in which children received intensive English language instruction using science as the content vehicle, an oral-aural Spanish approach in which children received intensive Spanish instruction using science as the content vehicle, a non-oral-aural approach where children were given science instruction but no intensive language instruction, and a control group where the children were taught regularly. Modifications involving language cognition and discovery approach have been instituted at the fourth grade level. Bilingual treatments have been recently added to the teaching methodologies. In addition, in-service teacher education programs and various pilot studies are integrated. Extensive evaluation measures a growth in oral language skills and science concepts. Further information may be obtained from

Mr. Thomas D. Horn
Curriculum and Instruction
University of Texas
Austin, Texas 78712

COUNSELOR AIDE FOR THE MEXICAN-AMERICAN
San Diego, California

Escondido Union High School District in San Diego County, California has instituted a program providing counselor aides for the Mexican-American. Objectives are:

1. Mexican-American students and parents who exhibit adjustment problems due to a language barrier or cultural/socio-economic background will be identified through personal contact; they will be assisted in adjustment to the educational program which meets their needs.

2. Communication between schools and home and community will be improved through enlisting the cooperation of the parents; low income families will be put in touch with agencies and educational facilities for help.

3. By instilling a sense of confidence and helping the student to realize his abilities and aptitudes through intense individual counseling, the student will improve in performance and self image.

    a. Classroom attendance will improve through working with the entire family and stressing the importance of an education.

    b. Potential school dropouts will find more opportunity for employment through educational and vocational guidance.

Implementation of the program includes home contacts by the bilingual counselor aide, coordination of all school districts to assist the student and family, educational and vocational guidance, and referrals to appropriate community action agencies for assistance. Ultimate action will be determined by the counselor after having completely assessed the situation.

Further information may be obtained from:

Project Director
East Fifth and South Maple
Escondido, California

5. TESTS AND MEASUREMENTS

1.0 Introduction

Testing bilinguals has received much attention from researchers for a long period of time. Much of the research has been comparative studies between bilinguals and monoglots. The testing of bilinguals can be divided into three periods. During the first period when the theory of racial psychology was rampant, the general conclusions were that bilingual-bicultural individuals were inferior in intelligence testing to monoglot Caucasians. In the second period when there was considerable doubt about the validity of the testing instruments when applied to bilingual-biculturals, the thrust was to develop cultural-free tests, e.g., Davis-Eells Games. The testing results did not improve considerably and this led to the third period where the thrust has been the development of culture-fair tests and the development of local norms instead of relying on the standards of the norming group.

2.0 Summary

Intelligence Tests The literature is in general agreement that when intelligence tests are applied to bilingual groups, the scores obtained are much lower (about one standard deviation) than the scores of the norming group. It has been found that when non-language or performance types of tests are administered, the results are more favorable. (Darcy, Bloom, Eells, Havighurst)

These findings have led to the conclusion that the language deficit and/or language barrier is the main causative factor of the low scores of bilinguals in intelligence tests. (Holland, Henderson). There is some evidence that points to the possibility that other variables may be amiss. When a group of Spanish-speaking students were administered the Stanford-Binet both in English and in Spanish, the result was that the sample scored higher in the English version than in the Spanish although the scores in the English version were about one standard deviation below the norms. (Keston and Jimenez)

Results indicating test discrimination against lower social classes were obtained by Eells and others in their assessment of the most widely used tests in the Chicago schools when low and high socio-economic groups were compared. (Eells) When the Goodenough Draw-a-Man Test was applied to a group of "advantaged" and to a group of "disadvantaged," the results were significant in favor of the advantaged. (Hanson) Zintz and others concluded that besides the language and experience barrier there was a culture barrier as well that could not be overcome by the bicultural child. (Zintz) When socio-economic class and age are held constant, the results tend to be that the bilingual shows superior intelligence, greater mental flexibility, superiority in abstract concept formation, and a more diversified set of mental abilities than the monolingual subjects.

Achievement Tests Nonetheless intelligence test scores continue to be the best predictors of school success. High correlations are still being obtained when intelligence scores are compared to achievement scores. (Peters, Cooper) But since the results in general in the area of achievement testing have been that the bilingual child scores significantly lower than the English child, (Floyd, Zintz) the phonomenon can be readily understood. One must also remember the historical origin of intelligence testing when Binet established the validity for his scales with school achievement. Somehow or another through validation of instruments with other previously established instruments,the vicious circle of the intelligence instrument being validated with school achievement and then becoming the best predictor of school success continues to plague us. At the same time the high verbal content of the tests must be taken into consideration which is the same in the area of school achievement. Nonetheless, when the bilingual and monolingual are matched by grade level and social class, the results tend to be that the significant difference disappears in most areas of achievement. (Cline) The type of background whether rich in socio-cultural experiences (rich in terms of compatibility in terms of the demands of the test) or impoverished in those same terms seem to be a very significant factor in the area of school achievement and in the area of scores obtained in achievement and intelligence tests.

At present there is definite conviction that application of the national norms of any type of test to Indian-speaking or Spanish-speaking youngsters gives spurious negative results. Nonetheless worthwhile use of test results have been found through the development of local norms. Taking into consideration the language barrier, the experience barrier and the cultural barrier, intensive extrapolation has to be made in the establishment of local norms.

III

IMPLICATIONS FOR EDUCATION

The section for implications for education has been derived from the research literature that has been reviewed, from other theoretical propositions and from logical extrapolation. This section is divided into the (1) goals of education (2) the bilingual education program (3) teachers for bilingual education (4) materials for bilingual education program (5) methodology and bilingualism (6) evaluation of the bilingual and (7) public relations in the bilingual program. It may be noted that while the emphasis is on bilingual-bicultural education, many implications may be common to the regular program. The fact of the matter is that bilingual education has many problems that are common to all types of education.

1. GOALS

The purposes of bilingual education, like any other goals of education, must be stated in desired behavioral outcomes. Only when one states the goals of education in terminal behavior concepts does one have the opportunity of evaluating if the goals have been met or to what extent have they been met. In the area of bilingual education, behavioral objectives must at least be stated in the following areas:

a. language skills
b. knowledge and concepts
c. application and use of knowledge and concepts
d. development and reinforcement of attitudes
e. social functionality.

Language Skills

The primary thrust of bilingual education is the inclusion to some degree of a second language other than the language of the school. It is necessary to state to what extent proficiency in the use of this second language is desired of the students.

In some programs the native language of the child, in this case, Spanish, is used as nothing more than a vehicle by which the child is directed into learning English as a second language. In this type of program, different degrees of proficiency in the Spanish language are required of the child. For example, it is possible that the very substandard Spanish that the child has will be used to make the child proficient in the use of English. In this case little or no instruction is given to the child in becoming more proficient in his native language. In this same type of program, also it is possible that a minimum amount of instruction in the native language will be given, in order to make the child literate in his language before attempting to make him literate in the English. Nonetheless, the impact of instruction received in the native language, whether pertaining to subject matter or the language, is minimal because in these programs the major objective is to transfer the child from the use of his native language into the use of the language at school as fast as this can be accomplished.

Now in another type of program where equal proficiency in the two languages is desired, the objectives seem to be quite clear. The child will become as proficient in Spanish, for example, as he will be in English. In order to accomplish this, equal amounts of proficiency training need to be given to the child in both languages. Often the curriculum developers assume that because a child speaks Spanish, a language which they do not understand, that child is more proficient in Spanish than he is in English. The truth of the matter is that very often he may be much more lacking in Spanish than what he is in English. But even if he were as proficient in Spanish or more proficient in Spanish than he is English, much like the English speaking child, the bilingual child also needs development and instruction in his native language.

Regarding the use of the native language for the purposes of instruction, it is an important matter, more of a logistic nature, that the curriculum developer state what courses, what classes and what areas should be taught in the native language of the child and which should be taught in the language of the school. In order to have instruction in another language, the teachers assigned to teach in the second language* must be bilingual. At the same time, there are certain valid subject matter areas and certain materials that are better presented in one language than in another. And to have something taught in the second language just for the sake of having a bilingual program does not seem to warrant much merit.

Knowledge and Concepts

The knowledge and concepts that are going to be taught in the curriculum, whether they be in English or in Spanish, need not present any more difficulty in the scope and sequences than they would in a monolingual program. It is desirable to develop the scope and sequence of all courses and subject matter area in terms of some type of taxonomy. It is not the place of this study to recommend one or the other type of taxonomy. There is one factor to consider, however, in delineating the subject matter areas and the different concepts that are to be taught in one language or another. The bilingual child, because of his psycholinguistic tendencies, would perhaps become more emotionally committed to a given concept if that concept were taught in one language or another. For example, it makes very little sense to have the child stand up and salute the flag in English, and then after finishing the saluting of the flag and singing "God Bless America," immediately resaluting the flag in Spanish and singing the same song in Spanish. On the other hand, if it is a question of studying about the family or some aspect of Mexican-American culture, it would make some sense to use Spanish teaching this unit than it would to use English. Thus, in the development of a taxonomy for the bilingual program, one of the strong implications seems to be that we take into consideration the psycholinguistics and emotional commitments of the bilingual child stemming from his language and his culture.

---

*For the purposes of this report, the second language of instruction is the native language of the child.

Application and Use of Knowledge Concepts

Again it would seem that the development and statement of this type of objective would not be any more difficult than stating those same objectives for a monolingual program. However, one has to understand that the bilingual child, especially in the Southwest, is a bicultural, bi-social individual. He lives in the world of his native Mexican-American culture as well as in the world of the Anglo-American culture. Certain types of behavior are desirable in one socio-cultural context and not so desirable in the other. The child must learn to discern in what socio-cultural context different types of behavior can be used with least ill effects and with major desired outcomes. At the same time the bilingual-bicultural individual needs to know what set of values are attendant to the different roles that he plays in the two socio-cultural worlds. For example, to use the values set of competition within the Mexican-American family would cause disharmony and perhaps even disruption. On the other hand, not to use the cultural set of competition within the labor market but replace it with the cultural set of cooperation can be detrimental if not disastrous to the individual. Thus, we have to think in terms of the socio-cultural context in which the individual is going to operate and try to develop in him knowledges and skills and where certain value sets can best be used without any detrimental effects on him and with maximum desired results.

Development and Reinforcement of Attitudes

The research is rather scant on the effect that consistent insistence on middle class behavior in the school setting has on the bilingual-bicultural child. But even though this area has not been adequately researched, nonetheless people who have worked for several years with Spanish-speaking bilingual-bicultural individuals are convinced that this insistence on middle-class behavior has had serious negative effects on these children. Such children generally become ashamed of their culture and think that the Spanish language is inferior to English. The studies on acculturation project this. Thus we have quite a few statements of objectives in dealing with reinforcement and development of a better self image of the bilingual-bicultural child. It would seem that this is one of the strongest reasons why there should be a bilingual bicultural educational program. However, to state an objective such as, "One of the purposes of the bilingual program is to develop a better self-image or self-concept of the bilingual child, is saying nothing. We must express objectives in terms of behaviors that can be measures. For example:

The bilingual child will participate in extra class activities.
The bilingual child will learn about his cultural values.
He will see the differences between his native culture and
    will see the differences between his native culture and the
    Anglo-American cultural value systems.
The bilingual child will understand the process of acculturation.

Only when we behavioralize these objectives will we be able to attack them. We cannot develop a better self-image in a vacuum, and we cannot reinforce by omission.

The same principle holds true for the behavioralizing of any types of objectives and in the development of attitudes. It must be remembered that attitudes are difficult to teach. Many hold that attitudes can not be taught directly. It is important to manipulate the environment in selected ways in order to create a climate that will be conducive to the development of attitudes. Thus development of certain attitudes has to be considered on the basis of the personal system as well as the social, cultural system. It must be remembered that generally speaking the bilingual child belongs to a minority group with all the anomalies attendant to belonging to a minority group. Therefore much of what must be done must be that of providing equality of opportunity, not only in the area of learning of skills and concepts, but also in the area of attitude development. The failure syndrome, the timidity complex, and self-hatred attitude are all problems that seem to be prevalent among bilingual-bicultural children. This is not because they are bilingual and bicultural but because they are members of a minority group that has been stumped and squelched by a majority group. These attitudes are present in the parents and are reflected in the children. Extensive measures need to be taken in order to develop a wholesome personality in these children.

Social Functionality

It must be remembered that the bilingual-bicultural child is going to function, whether he likes it or not, in two worlds. He is going to function in the socio-culture of the Mexican-American and in the socio-culture of the Anglo-American. He will be buffeted by the forces of both. On the one hand he will be punished for being Mexican-American. The closer he approximates the typical behavior of the Anglo-American, the more readily the rewards of that socio-culture will be made to him, and the more real those rewards become. As he moves in this direction there will be a guilty feeling of having deserted his native group, his friends, and his family. There will be a nostalgia to return to the old social culture. There will be pressures on him to return and sanctions for having become a "Vendido." While the school cannot prescribe and cannot determine what the behavior of the individual will be after he leaves school, a very strong effort should be made in the bilingual-bicultural program to make the individual cognizant of all the dysfuncional forces that are going to be his lot in life because he is a member of a bilingual-bicultural minority group; for example, the problems accompanying acculturation, alienation, and discrimination.

Relation of Immediate, Intermediate, and Ultimate Goals

There has been a strong tendency to start the development of bilingual educational programs in a very piece-meal fashion. These programs reflect the attitude that the language is the most important factor in a bilingual-bicultural program. Therefore maximum proficiency in the second language, such as Spanish in the case of the Mexican-American, is needed before a bilingual program can be implemented through the rest of the school. Many programs reflect the attitude that bilingualism is not so very important after all. It is really a matter of a new toy to play with, especially since extensive federal funding is attached to it. Thus such programs as pre-school bilingual programs or primary bilingual programs are instituted. While these types of programs may have some merit, the final outcome in terms of desired terminal behaviors is very questionable. When the child is not given continuous reinforcement in a given aspect of learning, that learning will soon be forgotten. The Spanish that a child learns or uses in the primary grades as a vehicle of instruction, and that is not continued through the rest of his school career, will soon be forgotten. The child through a bilingual-bicultural program at the primary level can develop a better image, a better self-concept of himself. If it stops there, the child will benefit undoubtedly, but only for the moment. Constant reinforcement is necessary especially at the stage in life where the social-cultural set crystalizes in the individual. At this time the Mexican-American child begins to realize that he is a Mexican with all the forebodings and the disgrace attached thereto. Regardless of how much reinforcement the child may have had at the pre-school level or at the primary levels, when these negative forces hit him without reinforcement on the positive side, chances are that he will succumb to the negative forces.

It must be realized that the bilingual-bicultural program is not so different in the area of growth and development from the monolingual program. The teachers must be impressed that each one is part of a team, each one doing his expected part and no one is charged with the development and carrying out of the total bilingual-bicultural program. Whenever everybody wants to do everything, generally, nothing gets done. Therefore, the short range and intermediate objectives must be synchronized and coordinated with a desired terminal behavior of the bicultural-bilingual program.

The Bilingual Education Goals and Public Relations

Bilingual education on a widespread scale is a new phenomena in the phase of American education. Bilingual education had existed for the elite in the forms of leisure time learning. Bilingual education, where subject matter is taught in a language other than English, is a new implementation in the school. The public schools are the servants of a wider system of the parents and the taxpayers. A strong public relations program is needed for two basic reasons. One of them is to legitimize the bilingual education program so that the public, the parents and the other patrons of the school may give it the moral and financial support that is needed. The other reason why a strong public relations program is needed is the public relations program in the bilingual program is a natural vehicle to bring the Mexican-American or Indian-American parent who is not otherwise interested into the school. Through the bilingual-bicultural program, it is possible to bring the parents in to give them help and to get from them whatever they have to offer in the bilingual-bicultural program.

2. THE BILINGUAL EDUCATION PROGRAM

It goes without saying that if the goals of the bilingual education program have been stated in behavorial terms, the program to be implemented should reflect very closely those goals and objectives. The activities and materials used in the program should attempt to bring about those types of behavioral changes in the bilingual-bicultural children as are stated in the objectives. Often when the goals of a program are not stated in behavioral terms, the materials available and the text-books used in the program are those that determine what the goals and objectives of a program should be. Thus, it is a case of putting the cart before the horse. The materials and texts used in the bilingual program should be subservient to or should be the tools by which the goals and objectives should be reached. Similarily the activities through which the children are supposed to learn these behaviors and develop certain types of attitudes should reflect clearly the goals of the bilingual program. At the present, because there is a dearth of bilingual-bicultural materials to be used in the classroom, this danger is somewhat minimized. The program developers and the teachers of the bilingual education program have a clear field in which to develop and implement programs using the research available and the best theories that can be mustered without being impeded by inadequate materials.

The program itself should be realistic for the children it is serving. It is necessary for the program developers to have a very clear understanding of the social culture of the bilingual-bicultural child. This is necessary so that no falacious assumptions are made. For example, no assumption can be made regarding the extent of experiential background that the child may have in relation to the learning experiences to which he will be subjected in the classroom. In the area of language, for example, because these children in general come from such a low socio-economic group, they are inadequate in their use of their native language. Instead of having a rich background in their native language, actually they suffer from a very restricted background in any language. The same holds true regarding their cultural background of their native socio-culture. We have to remember that a vast proportion of the bilingual-bicultural children in the Southwest actually come from the culture of poverty or from the levels just immediately above it. This means that these children do not have many of the dexterities that ordinary middle-class children have. This means that we may have to start with these children at a very low level. It has to be a growth and development program in the full sense of the word, perhaps much the same as the growth and development program needed for other types of children who find themselves in this impoverished situation, whether they are bilingual or not. The bilingual-bicultural education program is an added asset, really, to a program of growth and development. It is hoped that the bilingual-bicultural program will aid and enhance the growth of these children at a faster rate than through an ordinary monolingual program geared to middle class children.

This means that the program should use all the available resources of the second language and of the native culture with which the child has greater familiarity to develop the children into greater breadths of perception and to wider scopes of value systems. In attempting to do this, however, the social culture and the personality of the individual must be taken into consideration. The reward systems implemented in the program should reflect the socio-cultural meaning that the children attach to such factors as reward and motivation and should not be reward or motivation that are meaningful only to the teacher. For example, the children of this low socio-economic level will rarely understand the age-old motivational structure of the teacher "good children do not do this, or do not do that." Mexican-American children tend to be much more realistic and will ask the question "why?" The same holds true for the punishment patterns. It is necessary for the child to know not only that he is being punished, but he should also know specifically for what reasons he is being punished. Often the reward-punishment patterns reflect nothing more than the idiosyncracies of the teachers and there is little thought given to growth and development in doling out rewards or punishments. The teacher must know the socio-cultural communication patterns of the children in order to be able to communicate adequately with them, not only in the reward punishment patterns, but also in the presentation of materials.

The ultimate goal in the area of language proficiency should be clearly reflected in the program of bilingual education. If a goal is not to use the native language of the child (the dialect that the child speaks) the child should be made aware of this so that neither he nor his parents expect further development in the native language. At the same time, if the goal of the program is to develop equal proficiency in two languages, the children should be made aware of this factor so that they will strive for proficiency and perfection in the two languages. Discrimination should be used in deciding what materials should be presented in which language. It would seem that it is a waste of the child's time to teach everything in the two languages. At the same time it is costly in terms of material and teacher energy to present everything in two languages. Because of the factor of time there are dangers of retarding the child in the acquisition of types of knowledge. If reteaching in the second language seems to be desirable for reinforcement purposes, that is another consideration, but the teaching of all materials in both languages throughout the program seems to be a waste of time and energy both for the teacher as well as for the child.

The ultimate goals of education are child growth and development which may be similar for all children whether bilingual or not, but the bilingual program should take into consideration the special needs of the bilingual children. The children who come from a middle class home which are from a bilingual-bicultural background present no special problems to the educator over and beyond those that middle class children of monolingual families present. The children from the lower classes, however, are a different story. These children have not had the opportunity in the home atmosphere, in the neighborhood climate, and in the peer group relations to develop along the similar lines of the middle class children. The experiential background of the children coming from middle class background tends to be much more compatible with the expected behavior in the ordinary program than that of the lower class children.

The lower class children come from an impoverished background where there is a minimum of artifacts that are conducive to academic growth and development, from a very restrictive geographical area, and from parents who in general have a very low educational attainment level and who are characterized by the restricted and often negative socio-attitudinal values of the culture of poverty. These children have not had the opportunity to develop to the maximum of their potential in many areas. The bilingual-bicultural program should take this factor into consideration.

This factor does not mean that we should embark on a remedial program. Remedial education has been widely misunderstood by both the lay public and by educators themselves. The thinking tends to be that through a given amount of remedial help, individualized tutoring, or special classes all children whould attain a minimal goal which are set up as standards for promotion or retention. The true spirit of remedial education is to take into consideration the given potential of the child and regardless of where he may be and regardless of what the goals and standards of the class may be he is given enough help to come up to par with his potential. It does not mean that all children can or will attain the standard of the class. On the other side of the scale we have the gifted child and the fast learners who may be equally or more educationally retarded than the slow learners. The tendency has been to leave these children alone and let them learn by themselves. A tremendous amount of time is wasted by these children because the challenges from the program are not there. These children are in just as much need to have remedial education applied to them as the children at the lower end of the scale. They need to come up to par to their potential even though they may be far above the standards set up for the class for the average child. This type of remedial education is needed as much in a bilingual-bicultural program as in any other program.

Much more important, however, is a concept of compensatory education. Taking the totality of the socio-cultural world of the bilingual child and the socio-cultural world in which the child is expected to function, one finds that there are gaps in the growth and development of these children. Over and beyond taking the ordinary growth and development patterns for which the school assumes responsibility, the bilingual-bicultural program should attempt to implement in its program activities and structures whereby these children will blossom out in the areas that had heretofore been neglected. Thus, for example, the bilingual-bicultural child coming from an impoverished home should be given the opportunities to learn what the so called "better things of life" are. He should be given the opportunity to develop along the lines of emotional maturity if that aspect has been neglected in his socio-culture. If the social culture has neglected the development of competetion skills in the child, the program should include activities where this can be developed in the child. At the risk of sounding over ambitious, the bilingual-bicultural education program, over and beyond including bilingualism and biculturism as an integral part of the program, should attempt to be a strong compensatory education program.

The program should not be over ambitious. This is an anomaly that is suffered by many educationists. Attempting to do more than the resources available enable one to do is just as disastrous as not doing anything. The goals and activities of the program should take into consideration the needs of the children who are going to be served, and take an inventory of the resources available. The extent to which there are resources available to expend on the needs of the children, to that extent the goals should be developed and implemented into a program. It is fruitless to state objectives for which there are no resources. A simple formula perhaps illustrates this point. The formula is:

$$\frac{\text{Effort}}{\text{Need}} = \text{Goal Attainment}$$

The need is measured in terms of the desired goal. In assessing the need, the amount of effort necessary to achieve the goal should be specified in terms of the specifics and logistics of the program. If the resources available are not sufficient to attain the goal, then the goal should be changed. Thus the goals should never be more than the system is willing to expend toward the attainment of these goals. These, of course, have some strong repercussions. Some of these repercussions we have already seen. The school systems generally have not been willing to give time and effort to meeting the needs of the bilingual-bicultural child regardless of the fact that they may have made adequate surveys of these needs. To state goals that are not going to be met is tantamount to not setting goals at all. Looking at it from the positive side, by taking a look at the needs of the children and what resources are available to meet these needs, the goals can be spelled out in a manner in which they can be attained. By assessing the needs and taking an inventory of the resources available, a redefinition of the uses of these efforts may result in redefining goals into a program that will meet the needs of these children by implementing a program that is realistic for them.

A word of warning perhaps is in order in the area of bilingual education, and that is that bilingual education should not penalize the bilingual child in growth and development in other areas of development. It must be clearly understood that regardless of how nostalgic and how enthusiastic the program developer of bilingual education may be, there is no merit in learning another language just for the sake of knowing it. If the bilingual-bicultural education program does not do anything to develop a more integrated personality and enhance a better self concept in the bilingual child, perhaps it would be better that bilingual education not even be attempted. If the child is going to be penalized in other areas of development for the sake of learning another language without ample justification, careful stock should be taken of our motives. In short, bilingual and bicultural education should open the door, broadening the horizons of the bilingual child, and enhancing a more integrated development of his personality.

3. THE TEACHER AND BILINGUAL EDUCATION

The teachers in the bilingual education program should have the same type of qualifications that are required by district regulations as well as by certification laws. It would be falacious to assume that "paraprofessional" people who do not have much training in the area of education theory, child growth and development, and the subject matter areas of instructions would be good teachers just because they may happen to be bilingual. While some of these people would do well as teacher aides, definitely they would never be able to replace the fully qualified teacher. On the other hand, these people can become a welcomed bridge between the school and the home, between the socio-culture of the school and the socio-culture of the community, and provide a wholesome interaction between the two socio-cultures. Because of lack of training and lack of experience, it cannot be assumed that the paraprofessionals can assume full responsibility of the program. These teacher aides must be under the guidance of a master teacher who is fully qualified in all aspects.

Over and beyond the regular qualifications required by the district and certification regulations, the bilingual teacher should have qualifications beyond the average middle class teacher. This teacher in the bilingual education program should be the person who has deep understanding of socio-cultural theory, and of child growth and development and personality development theory. This teacher should know through experience, through interaction, and through scientific understandings, of the socio-cultural background of the bilingual-bicultural child. It is not sufficient for a teacher to be of good will, desirous to do right by these children. These children, in a very realistic sense, are exceptional children. They are bilingual-bicultural and they come in general from a social class that is very different from the background of the teacher. Their emotional commitments, value system, and cultural perceptions are very different from the middle class oriented teacher. And it is the teacher who should be able to understand the background of these children, and not the children having to accommodate themselves to the socio-cultural idiocyncracies of the teacher. The teacher must be able to communicate with these children. That is what she has been trained for; this is the job that she has to do.

Cultural understanding, from a theoretical, scientific frame of reference, is not sufficient for these types of teachers. These teachers should be empathetic to the socio-culture of the children. They need to know them for what they are in order to help them develop broader horizons and greater functionality into the socio-culture in which they will be required to operate. A teacher who is not culturally sensitive, nor emotionally empathetic with these types of children will not be able to fully understand the personality make-up of these children, nor will she be able to motivate them to greater areas of achievement and development. A teacher who is insensitive and unable to empathize with these types of children will have a severe adverse effect on these children and will provide strong catalystic elements into the self-fulfilling prophecy of the failure syndrome. By her insensitiveness, she will place the child time and again in situations of cultural conflict. She will develop a greater defensiveness amongst these children by her insistence on certain types of behavior and certain middle class standards of achievement along goals that are utterly foreign to these children. She will aggravate the anxiety that is already present in these children. The results can be readily forseen that alienation, especially in the area of isolation, would develop to an extraordinary degree. This can be avoided by having knowledgeable, empathetic teachers working with the bilingual-bicultural individual.

The teacher of bilingual education should be a bilingual herself. It is not imperative that all teachers be bilingual, but at least those who are going to be teaching the child in the second language should be proficient enough in that language so as to offer themselves as good models for those children. Preferably the bilingual teacher should be a good model in both languages. The teacher of bilingual-bicultural children should be a person who not only can speak the language, but who also understands the culture of that language. Preferably, the bilingual teacher should be a bicultural individual. Bicultural in this sense is defined as a person who throughly understands the social and the cultural system of respective languages employed in the program. A bicultural individual is a person who is not overwhelmingly emotionally committed to the roles and values system of either culture. Rather, a bicultural individual is one who knows the roles that are to be played in each culture and understands and appreciates the intended values of each role. But through higher spiritual development that person has been able to see the "games that people play" in each socio-culture. Thus, the bicultural teacher is able to see the idiocyncracies of each culture, is able to see the values of each culture, and by having risen to a higher spiritual level, can make use of the positive elements and neutralize the negative elements of either culture. This would be optimal in having a bicultural teacher.

It is realized however that relatively few individuals can attain this level of development. The least that can be done, however, by way of providing a bilingual-bicultural teacher for the bilingual-bicultural child would be to eliminate all of those who have strong negativistic personalities. Such personalities exhibit extreme defensiveness, extreme anxiety, and other types of personality dysfunctions often because the teacher is a bilingual-bicultural member of a minority group. In this regard, it should be noted that a strongly militant teacher is perhaps the worst influence on a bilingual-bicultural minority group member. The strongly militant teacher, with her overwhelming missionary zeal may fire these children into activities that are not only socially unacceptable, but morally reprehensible. A stable personality, a cheerful attitude, and a deep understanding of children are all desired qualities in a bilingual-bicultural teacher.

4. MATERIALS

At present there is a dearth of materials for bilingual-bicultural education programs. The materials that are in existence today tend to be translations from the English originals. Relatively little material has been developed originally in Spanish, if that is the language that is going to be the second language in the bilingual program. Some of the materials that are translated are very good indeed, especially those which deal with the sciences or mathematics. However some of the other materials, which are direct translations from the English versions, do not fit into the socio-cultural context of the Spanish language. And therefore, they seem to be somewhat unrealistic to the student himself. Some of these translated materials lose the essence that they possess in the English language through sheer loss by translation. Others are so much out-of-context that they are ridiculous. Caution should be exercised in using the bilingual program materials that are direct translations from the English.

This implies for the bilingual education program that professional writers and publishing houses should start developing bilingual education materials that are written in the socio-cultural context of the language and preferably in the vernacular. Any number of topics can be used in these materials, but whatever they may be, they should reflect the culture of the language. Over and beyond the recommendation that the materials should be within the socio-cultural context of the language the other precautions applicable to the selection of materials for the regular curriculum also holds true in the bilingual-bicultural program.

The strong implication of the dearth of materials for bilingual education has to do with the teacher preparation program. As part of the preparation program the teacher should be trained to develop a great part of their own materials. There are many possibilities in this regard. Extensive use of AV materials, such as tape recordings, visual materials, and films of several types can be used. The personal experiences of the teacher such as travel should not be minimized. Some of them may have extensive collections of slides that they have taken in their travels. Also the community itself may include a wealth of relevant materials that can be readily incorporated into the program. Such things as historical sites which depict the cultural heritage, unwritten folklore, resource persons, and "cultural" models (exemplary persons) should not be overlooked. If these fit within the context of the units that are being taught, definitely these materials should be used. Other types of visual materials, such as overhead transparencies should be extensively implemented by the teachers.

The last very strong implication that this lack of materials has for the bilingual-bicultural program, especially in view of the not-so-extensive funding available, is that material selection should be done with utmost caution. We should learn from the experiences that we gathered from the adult education programs and the war on poverty where many of the materials that pass as "materials for adult basic education" were nothing more than copied materials from the primary and intermediate textbooks. It can very easily happen that the materials that will be developed for "bilingual education" may be nothing more than flimsy translations of the already existent materials. Thus the curriculum developers and the administrators, as well as the teachers, should take a very careful look at the materials in which they are going to invest their monies.

5. TEACHER METHODOLOGY

At the outset, it must be said that any method is acceptable in the teaching-learning process as long as there is learning taking place and as long as adequate communication between the teacher and the student is enhanced. There is nothing sacrosanct about any given method. Whatever method does the job is the right method to use. The skilled teacher will be able to move from one method into another so smoothly that the children will not be conscious of it, and often the teacher may be unaware of the transition. The prime consideration of the good, skilled teacher is that communication takes place at every instance.

Taking into consideration the so-called timidity of the bilingual-bicultural student coming from the lower classes, the approach that involves the student extensively perhaps is more desirable than an approach where the teacher does most of the talking or most of the acting. These children however, must be trained to operate and function smoothly and effectively in a permissive atmosphere. One has to consider the socio-cultural orientation of the autocratic family from which the Mexican-American comes, and one must train these children in the arts of self-instruction and group process. One must start, perhaps, with a relatively autocratic atmosphere and progressively extend it into a democratic, permissive situation. The children must be brought to understand what the democratic processes are, how they can function within them, and how they are able to get more for their time and effort by operating in a democratic situation than by operating only in teacher-directed activities. Also, taking into the consideration the timidity of the bilingual-bicultural student, whatever approach is used must always help the student develop more confidence in himself, and thereby permit him to project himself better into the group.

What one may call loosely, the bicultural approach, encompasses all the known methods at the disposal of the regular teacher. The basic difference perhaps between the bicultural approach and the ordinary approach is that the teacher in her sensitivity and empathy for the bilingual-bicultural student has deep down in her mind the totality of the situation from which the child comes and is able to use biculture or culture bound materials for the explanation of ordinary learning tasks in a manner with which the child can associate himself with them. A bicultural approach is helpful in attempting to explain culture sensitive material. So often, culture sensitive materials are either skipped, left unexplained, or gone over lightly with stereotypic explanations. The bicultural program needs to expound fully to the student what are the cultural implications, and what are the social significances of all concepts, theories or principles.

When the teacher is sensitive to the bicultural-bilingual student, motivation along the cultural patterns that are known to the individual may take place. For example, in recent studies, it is being found that in small group work, the bilingual-bicultural Mexican-American and Indian-American child is further motivated by having the reward pattern centered around the group, and not centered around the individual.

They feel more at ease and more motivated to move along if the total group is rewarded instead of singling out one individual. Similarly, in the socio-culture where competition is not a strong, viable force and is perhaps even looked down upon, the use of motivational structures that are highly competitive in nature may be detrimental to the children. The teacher of bilingual education should learn more about motivation of students who are not of middle class orientation. If teachers know what the motivational structures of the culture from which the children come, they would be able to implement them in their teaching.

Another area where the bicultural approach can be used is in avoiding culture conflict either in understanding or in emotional commitment. For example, in the old religion of the Indian people of the Southwest, the Navajos, it is believed that the center of the earth is in liquid form and that the people emerged from this to the surface of the earth. Much mythology and so called magical explanations are used in explaining the origin of life, the nature of the universe, and the personality of the individual. When a teacher in her science class almost irrationally expounds unmercifully on the scientific approach to the explanation of all natural phenomena, the bilingual-bicultural individual has a very hard time reconciling the theories of the teacher and the teachings of his native religion. In such cases the child will, because he is aware of the reward-punishment patterns of the school, learn to memorize and verbalize the data that the teacher presents, and he will be able to regurgitate these data when questioned on upon examination time. However, it is hard for a child to retain and internalize large amounts of data that may be in direct conflict with his socio-cultural understandings.

The teacher in approaching bilingual-bicultural education must be very sensitive. In dealing with a human personality, the teacher should strive to minimize the dysfunctional pressures that come upon the bicultural child because he lives in two worlds, and at the same time, care should be taken to minimize the effects of culture conflict in presentations to the child where cultural elements are in direct conflict, one with the other.

6. EVALUATION

The research is replete with the fact that in any type of test administered to bilingual-bicultural children, these bilingual children invariably score much lower than the normal group. There are very direct consequences from this phenomena. Primarily it has to do with the placement of the children in relation to their native capacity. For example, children who have the native capacity to score in the second or third standard deviation above the mean will invariably score one deviation lower. Thus, the bilingual-bicultural child at the top of the scale, when compared with other bilingual-bicultural children, usually places at the fast learner level when compared with the norms of a standardized test. The fast learners who are bilingual-bicultural children invariably will score only at the levels of the average learner. The average learner in turn, scores at the level of the slow learner, and the slow learner unfortunately scores at the level of the mentally retarded.

Unless the administrators, curriculum directors and teachers are fairly familiar with the lack of validity and often lack of reliability of almost any type of test when applied to bilingual children, these children will be placed in the wrong section of the program. For example, slow learners and often low average children are often placed in classes for the mentally retarded. The bilingual-bicultural child thereby is deprived of his right to equality of educational opportunity. Children at the higher capacity levels progress faster than the children at the lower capacity levels. The programs tend to be geared for this relative rate of learning. Thus when a bilingual child is placed at a lower level he can move only at the rate of that group. Either the teachers do not know how to individualize instruction or they are unable to do it, and invariably individual progression is equivalent only to group progress. Thus, the child who is placed with the normal children, even though he may be a fast learner, or a truly gifted child is not given the challenge to move according to his rate of learning. The result is that disinterest soon develops and this may be one of the factors that move them on to dropping out of school. When learners are placed in the wrong section of the program they are penalized unwittingly and suffer the consequences of this error.

In the area of diagnosis of bilingual-bicultural education relatively little has been done by way of instrumentation. The available reading diagnostic tests are probably good and will help the teacher in the regular reading program. The Miami Linguistic Readers do a much better job of diagnosis and remediation and prevention than probably any other type of reading series because these readers were specifically designed for the Spanish speaking bilingual. However, there are no diagnostic tests that were encountered in the area of teaching reading and ability to read in Spanish. Regarding diagnosis in all the other areas, apparently there are few, if any, diagnostic tests. However, as in any other type of achievement test, the language factor enters in to some extent in diagnostic tests, and other than diagnosing reading difficulties or language difficulties, it is extremely hard to diagnose the real learning difficulties of a bilingual-bicultural child.

Most of the administrators and educators who have had extensive experience in teaching the bilingual-bicultural child know the futility of comparing local test results with the national norms. All these educators know that the bilingual-bicultural group will be scoring much lower than the normal group. They realize that if the sole use of the test is going to be a comparison of a local group with a norming group it is money wasted and energy misspent. Diagnosis is virtually lost by the lack of validity and reliability of most tests when applied. Not many, however, have come to the realization that it is possible to use, with good results, tests, achievement, intelligence, diagnostic, by developing local norms that fit the situation. It is possible, with relatively little statistical intricacies, to develop means and standard deviations and relate them to grade levels if that is what is decided at the local level. This perhaps is the best use that can be made of these results.

Many educators almost categorically refuse to administer any type of standardized tests to the bilingual-bicultural child. They would much rather rely on the teacher's judgment and evaluation. However, this approach is not without its pitfalls. Often the teacher dealing with bilingual-bicultural students evaluates the bilingual-bicultural child in terms of her subconscious socio-cultural idiosyncrasies. The result is the child who conforms the closest to the expected middle class behavior patterns is the child that invariably is termed the best student or the smartest in the class. By the same token, those who refuse to conform or do not know how to conform to these middle class patterns or who are not as verbal as the middle class types, are termed slow learners and often mentally retarded. The teachers, even when attempting to evaluate the students by tests they develop themselves, may not know how to make tests that discriminate between the high and low achiever. Neither do they know how to develop test items of different difficulty levels. One reason for this is that the teachers do not know how to state their teaching objectives in behavioral terms. Thus they do not know how to gear their teaching activities toward attainment of these objectives. When measurement of progress toward these objectives is attempted, confusion runs rampant.

It seems that it would be very profitable for the school administrator to invest time and money in the development of local norms, both in the areas of achievement tests and intelligence tests. Efforts should be directed toward creating and applying diagnostic instruments.

Test makers and publishing houses have steadfastly neglected to develop the type of test that will measure adequately the bilingual-bicultural individual, principally because of the highly localized, regionalized situation. The result has been the development of generalized types of tests that are applicable nation-wide. It is virtually impossible to measure adequately with these general tests. Not only are there social class differences, but there are cultural differences as well. Even with so-called homogenous groups, there are perhaps more differences within them than when with compared to the Anglo-American middle class culture. For example, there is no such thing as an Indian. There are Navajos; there are Apaches; there are Pueblos; there are Shoshones; and so on. Each one of these groups has its own social and culture system. Similarly, there is no such thing as a Spanish-speaking in the United States. The differences between the Puerto Rican Spanish-speaking in the New York area when compared to the Spanish-speaking Cuban refugee are tremendous. When these two groups are compared to the Mexican-American of the Southwest, the disparity is even worse. Even though it is costly and beset with much work, in order to afford these children their rightful equality of educational opportunity, we must develop test instruments that adequately measure the capacities of these children as well as their learning difficulties.

7. SCHOOL AND COMMUNITY RELATIONS

The public relation program in any school has a two-fold job to perform. The first job is to give information to the public about what is going on in the school program. This has to be done in order to be able to legitimize the programs that we attempt in school. The school is part of the public sector charged with the training and the education of the American citizenry. It is supposed to perpertuate the ideals and dreams of the American democracy. At the same time, it is supposed to prepare people to earn a decent living in an American society. Because it is a publicly supported institution, the school should be accountable to the public it serves. Therefore, the problem of legitimizing its programs in effect is one of accountability. Also this accountability opens the doors for seeking support, both moral and financial, from the patrons of the school and the taxpayers, in order to be able to carry on the educational enterprise.

Unfortunately, because the school belongs to the public sector, and is supported by tax monies, the administrators have taken lightly their obligation of holding themselves accountable in the educational enterprize to the publics they serve. Often in seeking support for further educational monies when pressed for legitimization of their programs and accountability of their efforts, they will take refuge in "the sacredness of the task of education." This process is a widespread pattern in the American education scene. When the administrator faces the appropriation agents, he has been able, until recently, to obtain financial support in this manner without any real serious sacrifice on the part of the education enterprise.

Even though the administrator may have been able to carry on in this fashion in obtaining financial support for the regular education program, one must remember that bilingual education is a new phenomenon in the American educational community as well as in the American scene. There are too many people who are not fully convinced of the value of the bilingual program. They tend to take a look at the bilingual program as an aspect of leisure-time-educational activities, something which the upper class has the money to pay for and the time to afford. Too many people are looking at bilingual education programs with jaundiced eyes asking why should the bilingual-bicultural student be so rewarded over and beyond and perhaps at the cost of the monolingual, English speaking middle class child. The same criticisms that Headstart programs have encountered may be leveled at bilingual education. Thus it is important for the administration of the bilingual education program to have a strong public relations program in the area of information dissemination. He needs to legitimize his bilingual education program in order to be able to get adequate financial support for it.

The second job of a public relations program is to take a look at the community, at the nation and at the world to see what are the patterns that are developing in all areas, so as to be able to adapt the school programs in line with these changes. This is a matter of logic. But again, administrators have been remiss in performing this type of duty. They have surrounded themselves with the professional halo and feel that the public has very little to offer. Since they are not held accountable as a private enterprise in the type of products they turn out, there is a very wide gap between changing community and the modifications that are made in the education system. This perhaps may explain one of the reasons for the relatively few changes that have taken place in education over a long period of time in all areas of the educational enterprise.

The bilingual-biculture education which has been brought about mostly by the strong efforts of the minority group that will be served by it, has very strong ramifications not only in the area of giving these large minorities the rightful equality of educational opportunity, but it also has the ramification of bridging the gap in the United States and the rest of the world. In the case of the Mexican-American and the Spanish-speaking of the United States, for which this study was mostly directed, these people, if given the right type of training, can give us the bridge that is so desperately needed between the United States and the Latin-American developing countries. Some economists and other world analysts are forecasting that the 21st century is going to be the century of Latin America. The colossus to the North will diminish in size. What will be the place of the United States in this confederation? It may very well be determined by the type of bilingual-bicultural education given to the Mexican-Americans and other Spanish speaking peoples of the United States. This factor has to be considered in the development of the bilingual program, and in the adoption of the bilingual program in our public schools.

In conclusion we must be keenly aware of the timeliness of this issue. Unless schools act now, it is entirely possible that communities and their politicians will invade the vacuum and make and implement school policy on less rational bases than recommended above.

IV

IMPLICATIONS FOR RESEARCH

The material in this section parallels the structure presented in the preceding section, "Implications for Education." We shall examine some of the pressing issues in bilingual education; issues which have been only partially resolved from a research point of view. We will examine the same areas of concern mentioned earlier: goals, the bilingual education program (curriculum), the teacher and bilingual education, materials, methodology, evaluation, and school and community relations. Each of these areas will be found to include research topics of concern to the general profession of education. An attempt is made herein to avoid the temptation to explore in detail the many educational problems which confront all educators at all levels. Rather we will focus upon those questions which are primarily bilingual in nature. It will be necessary, however, to include certain problems which reach beyond the confines of bilingual education.

1. GOALS

From all the material that has been presented earlier, it would seem logical that the goals for the bilingual education program would include certain things of general significance to American education, plus those elements peculiar to the bilingual program. Such goals should give direction to curriculum planning, the activity program, how we group the pupils, school policy and rules, administrative procedures, community involvement, and other associated problems. If the objectives fail to communicate specific direction to the foregoing types of activities, then the objectives are amiss: restudy and replanning are indicated.

Sources for Goals

It is recognized that in general the matter of setting educational goals is not a "researchable" question. This type of issue has been perceived as lying in the realm of philosophy. More practically these decisions for setting educational goals have been left primarily to locally constituted boards of education and State Departments of Education. A thoroughgoing analysis of goals for the bilingual program could be based upon two rationales namely (1) authoritative statements made by various groups and (2) community analysis. The last forty years have seen the publications of many study groups and their views upon educational goals. These commission reports, e.g., The Committee of Seven, The American Policy Commission, have prepared carefully thought-out position papers and their recommended goals for American education. In addition professional groups such as the National Council of Mathematics and many other similar groups have prepared analyses of the educational scene and their recommendations for educational goals. Further various legal agencies at the federal, state, and local levels have disclosed certain obligatory or highly recommended educational objectives. It would be amiss to ignore this mass of data in the setting of educational goals and policy. What is needed is the research technique, "content analysis", applied to these statements so that the data are reduced to relevant objectives.

The community is the second broad reference for the establishment of educational goals. Here it would be desirable to secure the cooperation of labor, management, small businesses, parents, political groups, in a word, the power structure of the community. Groups from this structure should be mobilized to the end that their views on the nature of educational goals and purposes for their own school can be taken into account. Special effort must be directed toward enlisting the cooperation and expression of views of those minority groups within the community for whom the program is specifically developed. Again the research technique, "content analysis", should be applied to the findings from these various study groups and committees within the community.

From these two sources of goals, namely the review of authoritative statements and the analysis of community participation, should yield a system of goals and purposes valid for the community which undertakes this task.

The second broad step lies in taking each goal and defining the behavioral characteristics of boys and girls who have attained these goals. This time consuming task should consider each goal in relation to each grade level of the school, or perhaps each major subdivision of the school, that is, the kinds of behaviors expected of middle grade children who have reached the goal, the behavior expected of junior high pupils, etc. An example might make this clear. Let us suppose that we have agreed that one of the goals which we accept for our school is that of "worthy use of leisure time." Now we need to specify what this means for the first grade child. How do we expect the first grade bilingual child to behave when he has reached the goal of making worthy use of his leisure time? We might define this as including such behavior as:

> The pupil uses clay and other artistic media in his spare time.
>
> The pupil cuts out paper dolls in her spare time.
>
> The pupil collects insects.

This analysis needs to be made for each goal and for each grade level.

A subsidiary issue is the matter of devising educational goals. It lies in an often heard statement "we want, for our children in our school, the best of both cultures." If a community feels this to be a valid purpose of the school, it is necessary that the term "best of both cultures" be defined. It is entirely possible that this definition and its acceptance by the community may lead to the preparation of boys and girls to live in neither the minority nor the majority culture, but rather in a third culture. This will embody features of both but may not be purely one or the other. If this is what the community desires, it seems entirely feasible.

A final remark must be made and anent the amount of time that the foregoing analyses require. These kinds of tasks are far from being simple. They are complex; they are time consuming. Those who plan research in this area must consider the time and energy which will be required. It also seems as though such time and energy can be amply rewarded by the work well done. Clearly stated behavioral goals can serve to give direction to the varied functions of the modern bilingual school.

2. THE BILINGUAL EDUCATION PROGRAM

In this section we shall look at the major building block for curriculum development. These building blocks must include the nature of the learner. Curriculum, materials, curriculum programs, all of these are valid only to the extent that they meet the needs, the abilities, the characteristics of the learner. It seems that research is desperately needed to identify the characteristics of the bilingual learner. Much has been done by child psychologists, by educators, by linguists and by others in regard to the nature of the child of the majority culture. His likes and dislikes have been probed from infancy, childhood, adolescence and partially into adulthood. Comparable developmental research has not been directed toward the bilingual child. This omission makes it difficult to rationally devise curricula for such children. We will examine these problems under five major rubrics: mental, emotional, social, physical, and cultural.

Mental Growth

We need to know the nature of the bilingual child from the point of view of mental development. We need to know the type of concepts the child brings with him to school. Does he know, for example, the concept of square, of time, of justice? The published research on this issue is almost non-existent. We need to know how his linguistic patterns match and fail to match those of English. What phonemes in English does the other cultured child not possess? What language structures required in English are foreign to this child? What types of linguistic discrepancies exist? It is through ignorance on these points that we have rather consistently prepared reading programs of the "Dick and Jane" variety, and, as the evidence is so dismally abundant, these programs have failed.

We need further to know about the child's mental abilities, what types of problems can he solve, is he quantitative or qualitative in nature? How do these concepts exist in the child; how are they fostered and nurtured? Little has been done on these topics. Conceivably, one might apply newly created tests of mental ability devised specifically for this purpose, or one might judiciously select from certain tests that have shown promise, such as the Columbia Mental Maturity Scale, the Weschler Performance Scale, the Leiter International Performance Scale. These tests could be administered to carefully selected samples and the results factor analyzed to determine basic structures of mental ability, as Guilford has been doing with the majority group children.

Emotional Growth

We do not have a sound knowledge base concerning the other child's emotional growth. What are his likes? What are his dislikes? Does he like to climb trees, rough and tumble with the other children, make paper dolls? What sorts of rewards and punishments seem most effective with these children? As mentioned above, these questions must be raised at each level of the educational spectrum. We need to know the emotional qualities of our learner as he progresses through the educational experience. What are the things that draw and compel this child at the junior high school, what are his aspirations as he moves into and through adolescence? Some limited data suggest that the combination of low intelligence, low socioeconomic status and high drop out rates lead to early marriage. If this were true for a given group of adolescents, it would seem indeed pertinent to devise special curriculums which emphasized home economics, home and family living, livelihood, and other cogent topics. The trouble is that all too often we do not know of the presence, let alone the degree of, these emotional factors.

An interesting and important question in the realm of emotional development lies in that of role identification. Some bilingual educators strongly advocate the use of role models consonant with the child's ethnic background. Others have seen fit to question this assumption. Under which condition does the child learn more effectively; with role models from his own ethnic background or from role models from the majority culture background? Or should one use a third solution as that one embodied with the Miami Linguistic Readers; that of employing cartoon animals? We are considering role models which possess varying intensities of emotional attraction or possibly repulsion. A variety of experimental techniques is available to examine these points.

The question of the emotional climate of the classroom needs investigation. It is entirely possible that classroom climates which permit or accept laughing or making fun of errors in learning, and especially errors in pronunciation or grammar may increase the learner's burden. It may turn out that analysis would indicate certain alternatives which have a more felicitous emotional impact upon the learning process.

In a somewhat similar fashion research is needed to assess the role of the teacher's influence upon the learning process in the bilingual setting. We are concerned primarily at this point with assessing those emotional factors which might assist or impede the course of instruction. The nature and functioning of these kinds of variables would probably be clearer if we had access to a definitive taxonomy of the bilingual child's patterns of emotional growth.

It has been said by some that Spanish-American children respond best to close, physical, affective relationships. These children are said to live in a physical world, not a cerebral world. In the same manner it has been said that Indian and Anglo children tend to be more cold, more reserved; that they tend to avoid physical contact. These assumptions could be tested by research methods. It would be especially relevant to examine the relationships between these kinds of school environments upon the learning process.

Social Growth

We need to know the social patterns of bilingual children. We need to know this in several contexts. Of first importance is that of the child's social relations with significant others: his peers and the emotionally important adults in his life. Under what conditions are these relationships satisfying; under what conditions are they dissatisfying? What kinds of leadership models are best suited to the child? Anglo cultural norms suggest several leadership role models, namely those of the intellectual and those of the exuberant "hail-fellow-well-met" type. We do not have, at present, comparable data for the bilingual child. They are needed. Knowledge of these variables conceivably could help us in the more judicious establishment of standards for teacher selection to work with the bilingual child.

We need to develop a more comprehensive understanding of the bilingual child's most effective grouping patterns. This analysis should be conducted at the various levels of bilingual education. What kinds of groupings are most effective at these levels? Does the bilingual child learn more effectively when working on an individual basis, a small group basis or large group basis? Some rather informal data on this question suggests that on the one hand Indian pupils in the primary grades work more effectively when placed in large groups. Conflicting results have been found in the higher grades -- at the junior high school and senior high school level -- certain grouping procedures have been called into serious question. The entire matter needs the attention of researchers.

Physical Growth

We are not aware of the physical characteristics that the bilingual child brings to school. To what extent is he coordinated? Is he strong? What kinds of things can he perform in the physical domain? What about nourishment, general health, hearing, vision? The answers to these kinds of questions have much for the types of school programs that we prepare for the child. It is commonplace to note that the Anglo adolescents have inadequate diet habits in that they often limit their diets to Coke, hamburgers, and french fries. The full range of physical growth patterns needs to be established for the bilingual child. What are the bilingual adolescent's patterns? What are the implications for school planning?

The question of dietary deficiency deserves careful examination. Data have recently been derived from other cultural groups with regard to their dietary patterns. Certain findings indicate that even mild, chronic malnutrition may cause permanent retardation of certain mental growth functions. If this were found to be the case, remedial steps should be inaugurated to prevent the emergence of any type of impairment from this cause.

Cultural Problems

To what extent and how does the bilingual child's culture affect the course of learning? It has been observed in other studies in many circumstances that what is taught, why it is taught, and how it is taught is affected by the dynamic social forces in play. We need to understand how these forces affect his development. For example, it has been observed that the bilingual child at home depends pretty much upon himself to learn such concepts as hot, toys, friends, dog, etc. The home does not provide specific guidance in this learning, rather it provides an environment in which the learning can occur. The child, however, is his own teacher. Now, as the child comes to school, how does this previous experience relate or interfere with the school's efforts? Is it possible that the school should plan a learning environment more in tune with that which the child has already experienced? If, in fact, the child's learning has been largely self-directed, then it is possible that the school program should aim in the same direction. It's just possible that the child who comes from a self-directed environment and is confronted with a highly structured environment will meet frustration and learning loss. Unfortunately we really do not know how these forces operate outside the school. Studies need be directed at understanding these variables.

The matter of concept learning and concept formation seems to lie at the heart of our concern with bilingual education. Much evidence has been presented elsewhere to indicate that the bilingual child does not learn concepts in the same way or at the same rate as the majority culture child does. Perhaps this difficulty is related to several others. First, the major business of the early grades is that the child learn English and all that goes with it. As we present the instruction in English, we often go to great pains to avoid incumbering the learning process with new concepts other than those acquired in English. That is, if the child does not have the concept of square root, it is unlikely that we would stop and teach that concept. Rather we would teach square perhaps in the context of rectangularity and we'll get the root idea across in some agricultural or plant sort of way. The point is that we have planned carefully to avoid adding concepts beyond those which the child already has when he comes to school.

This approach to curriculum development needs to be challenged. We have found in other studies, particularly, those conducted under the auspices of Olsen and his students during the 1930's that when organismic age is hindered in some way, the consequences can be far-reaching. And in many cases, physical blockages of this sort become irrevocable, that is, the condition may never be completely ameliorated. Applying this to the idea of mental growth, we can see that it is entirely possible that our preoccupation with the teaching of English fails to present the young, growing mind with concept development. This preoccupation with teaching of English may so limit and inhibit the child that his ability to learn new concepts may be retarded, if not completely blocked. It would seem, then, experimentation is indicated to examine the number and kinds of concepts that can be most efficiently developed with the long term goal of preparing a child who is able to cope with many concepts aimed at him at the same time. This is analogous with the typical adult in today's world who is immersed in a sea of stimuli; urging, telling, requesting, suggesting many divers courses of action.

Today's adult must cope with these many demands, sorting out those stimuli of relevance to him. A bilingual child presented with a curriculum which reflects paucity of conceptual development, rather than richness, may be severely crippled in the process. One might look at the history of the "head start" program. One gets the impression that head start initially aimed at concept formation, but gradually seems to have moved from that broad goal to the goal of "getting them ready for the system that fails."

A final point needs to be made concerning language acquisition. The current theme in "teaching English as a second language" is that of language acquisition. Pattern drills, pronunciation drills, language structure -- these things are highly emphasized and with considerable justification. However, almost completely omitted is the notion of functional transaction. That is, the question "Give me a book" is a verbal linguistic sentence, but it's also a transaction between human beings. Maybe the owner of the book does not want to release the book; maybe he will release the book under certain conditions. Maybe we ought not to even ask the question, as in the case of a highly valued book owned by a respected and older community leader. Our point here is this. Concentration upon a narrow front may result in failure to recognize broader implications of education. Research needs to explore the possibilities of using learning to achieve a variety of goals in contrast to the more limited approach.

3. THE TEACHER AND BILINGUAL EDUCATION

The controversy is rapidly escalating with regard to the desirable characteristics for teachers of bilingual children. On the one hand we are urged to restrict the ranks of bilingual educators to those persons who are themselves bilingual. On the other hand attention is called to the possibility that the essential factor is not that of bilingualism but rather a set of variables relating to teacher personality. Persons who uphold the latter point of view would urge that we consider such variables as teacher acceptance, teacher understanding, and teacher knowledge of multi-culture factors.

To what extent does the bilingual teacher need to possess familiarity with the "other" language? It may be as suggested elsewhere in this document, that familiarity with the child's language is an important ingredient in learning. On the other hand, it may turn out that language understanding is a partial, or even insignificant variable, and that the real variable is that of empathy. If the teacher understands the child, his problems, and his background perhaps this is what is important. This leads to a second research question, namely, what type of teacher preparation seems desirable for those who plan to embark upon a career of bilingual education. Research is nonexistent on this topic.

One would suspect that the results of a field study comparing the effectiveness of teachers who have received a broad education in the behavioral sciences (economics, psychology, political science, business administration, anthropology, etc.) with teachers whose backgrounds are limited would be most interesting. One might apply such criteria variables as teacher turnover, community acceptance, pupil growth, teacher absentee rate, and other systems type variables.

From the logic of the situation, it would seem that the teacher of the bilinguals should have a firm cognitive understanding of culture and its many ramifications. This teacher needs to know of value systems, and how they differ across cultures. This teacher needs to know how these findings can be applied to curriculum development, teaching plans, and classroom management. At the in-service level, it should be no great chore to devise tests of knowledge and relationships to determine the extent to which the teacher has acquired the concepts believed significant in the bicultural context. At the in-service level it is feasible that workshops, seminars, field trips and discussion groups could be organized to help develop in the present teachers a knowledge and understanding of cultural variables and their effect upon the learning process.

The factor of prime significance probably lies in that of teacher personality. Ulibarri did discover that teachers seemed to possess some "strange" ideas about the bilingual child. He also found certain personal attitudes of an undesirable nature were present in some teachers of bilingual children. This whole area deserves research attention. What are the characteristics most desirable in the teachers of bilingual children? Research has not yet attempted to answer this question. It is high time that it did. One could approach this topic with the Ryan model of teacher characteristics, or one might move from a theoretical model which delineated the expected properties of the effective teacher and put these to an experimental test. There are many output variables which would be relevant in this type of research, e.g., achievement scores, anxiety scores, alienation scores, and absentee rate. There seems to be considerable justification in the light of our present knowledge for defining the effective teacher of bilingual children as being one who neither perceives the child as a noble savage or as a dirty slob. Someplace in between should lie a more accurate perception.

The use of teaching aides or paraprofessionals raises some interesting questions. Research might test the hypothesis that the bilingual child will learn more efficiently if he is presented the content material, both in his own language and again in English. The converse of this proposition is that the child who is not spending twice as much time on content material will cover twice as many different subjects. These ideas have been bruted about and deserve the objective eye of research.

4. MATERIALS

Research is needed to determine the kinds of materials, the sequences of materials, the variety of materials which would be effective in the bi-cultural educational setting. Preliminary analysis would indicate several points. First, our experience to date has indicated that the bilingual child has not made adequate progress with the current set of educational materials. These materials, it should be noted, are typically abstract types of materials. They consist of readers, supplementary readers, social studies books, science books, and the like. All of which require considerable sophistication with both the language and with the culture for which the materials were developed. Many studies have shown that the bilingual child tends to score higher on performance tests of ability than he does on verbal tests of ability. The implication for curriculum materials seems clear. Curriculum materials should, at least at the early stages of learning, be developed on a non-verbal basis. They should be developed as performance materials, that is, the child needs to learn by doing, or learn by seeing, or learn by participating. This would encourage the application of weighing, measuring, counting, handling, building and other participatory types of activities. A non-verbal approach would encourage the use of role playing and dramatization of ideas in the learning process. There we would stress the importance of using a multi-media approach to education with films, film strips, video-tapes, tape recorders, models, mock-ups and the like. We have not, at present, accumulated evidence on the effectiveness of these approaches. These need to be put to the experimental test. One would certainly consider the Stanford micro-teaching units, wherein small segments of subject matter are presented. In this design we would present certain segments verbally and certain segments with various and sundry of the foregoing techniques involved. A series of such studies conducted at any given age level should reveal much of the nature of learning. Of more immediate significance we are likely to identify the kinds of learning materials which give us the most payoff.

5. TEACHER METHODOLOGY

Some of the concepts to be examined under the heading "teacher methodology" have been discussed previously under "materials." However, here we will look at some concepts that have gained certain vogue on the broad educational scene. First, team teaching. It does seem as if team teaching has a unique role to fill in bilingual education. This might be especially true when the teacher is not fully conversant with the other child's language or his customs. A teaching team could very well include the professional teacher and one or more selected teacher aides selected on the basis of their general knowledge and understanding of the school's purposes and of their specific intimate knowledge of the language and culture of the bilingual child. By means of careful planning sessions, these teams could present the various aspects of the curriculum. The effectiveness of these programs could be tested experimentally. Certain pupils being exposed to the team approach for certain concepts, and other children being exposed to standard method. These relatively simple straightforward designs should shed light on these questions of teacher methodology.

A second issue was touched on earlier when we examined the matter of social growth. The question from a teaching methodological point of view is that of grouping. How should pupils be grouped, if at all? Should we depend upon individualized instruction, if so, under what circumstances and for what topic of the curriculum and for what age levels, and the like?

A subsidiary question lies in the area of programmed instruction. It is possible that programmed instruction has an even greater potential for helping bilingual pupils than it has shown in other levels of education.

A discussion of teaching methodology must also include a consideration of motivation, rewards, and punishment. What types of rewards are most effective and under what circumstances? Experimentation has recently disclosed that certain concrete rewards (candy, gum, toys) have been effective with first grade children. To what extent can these findings be generalized? Under what conditions? How often? How much? For what subjects? In a word, it would seem desirable to encapsulate various methodologies of concern and submit them to experimental tests. In this way we shall find those methods which are effective and useful and those methods which are less attractive to our over-all purpose.

6. EVALUATION

It is current school practice that evaluation occur before, during, and after the educational process. The results of these evaluations have not always been used as feedback mechanisms to strengthen and correct weaknesses in the program. The ensuing discussion focuses upon some major dimensions of evaluation in the feedback model, namely, that evaluation should help us to see the areas wherein we are being effective and to help us identify those areas which need strengthening.

In the area of achievement testing, there is considerable hue and cry that the standard tests really do not measure the achievement of the bilingual child. If the school evaluation program is clearly based upon its stated objectives, then this criticism should not apply because in many cases our evaluative instruments will not be the typical standardized test. If they are the standardized tests, this would only be so because it is felt that these tests do, in fact, measure the school's objectives. In most cases, it does seem as though school systems will wish to tailor-make their achievement measurements to fit their own objectives. This may demand the creation of local evaluation schemes, local instruments. The money so spent should have rich rewards in that the school now evaluates those things it deems important, and not those things deemed important by national test publishers.

Most school objectives will include mention of the necessity of preparing the bilingual child to develop wholesome attitudes toward himself, toward others, and toward his environment. Acceptance of these goals implies the measurement of the same. It is possible to do these things particularly along the lines recommended by Osgood and his students. Their application of the semantic differential across cultures has shown high promise. In the same way other researchers have devised methods for assessing these so-called "intangible" variables. It would be a most desirable research enterprise to examine school objectives for developing attitudes; to devise instruments for their measure, and evaluate and apply these instruments.

A valid goal for many bilingual schools will be that of understanding needs to be clearly identified. Then, appropriate instruments should be devised for different levels of education, evaluated and applied. The question of creativity for bilingual pupils could be explored via the standard "Taylor-type" devices. Perhaps the bilingual culture itself will suggest areas for creativity research.

At the secondary level of education, we need to undertake research to validate certain of our occupational predictive instruments. This would include the occupational interest tests and the occupational aptitude tests. That is, to what extent do these Anglo middle class instruments yield effective predictions for bilingual youth? A similar question could be raised concerning occupational aptitude tests. It is likely that for this latter question, the data have already been gathered, but perhaps have not yet been analyzed. Reference is made to the broad scale testing programs conducted by the military, by draft boards, and by various agencies of the government, namely the United States Employment Commission.

Another broad area of research lies in assessing the effects of environmental influences upon the bilingual child. One might hypothesize that environments characterized by highly divisive elements would in turn have significant and divisive effects upon the bilingual child. The growing militance in certain bilingual communities has already yielded rich, if unsavory, evidence upon this point. Organizational theory has provided certain concepts regarding organizational climates. These concepts could be applied to the assessment of environmental climate, and the effects of environment upon the pupil could be more readily assessed. Evidence has been accumulated which shows that sometime stultifying influences of the community upon the child's level of aspiration. These areas need to be assessed so that effective planning and implementation can proceed. In this context, studies which have been made of anxiety need to be furthered. The general finding that Indian pupils score high in anxiety tests, Anglo students score low, and Spanish children score in the middle, need to be explored more fully. What causes levels of anxiety? What is their educational relevance?

At the intellectual level we are still searching for that "philosphers stone" in the area of mental testing. Where, oh, where is that test that will measure adequately the mental ability of all pupils in all cultures? Many have searched, but the results have been less than promising. However, one could address research to some rather recent findings showing that the Goodenough Draw-A-Man Test yields scores which are consistently higher than those from certain other tests. Perhaps the idea of visual perceptions needs to be developed more fully in the bicultural context, and research should focus on the nature of perception across cultures.

7. SCHOOL AND COMMUNITY RELATIONS

There are many difficult problems in the area of school and community relations. Much to our shock, surprise, we find that from time to time that talk of bilingual programs runs into heavy opposition from Spanish-speaking and Indian parents. They feel that such programs are steps toward the past. Some parents do not want their children to learn their native langauge because of the possible language confusion that might emerge. Our research tells us, the professionals, that these fears are groundless. But how do we win initial support for our programs? Before implementing bilingual programs, plans must be devised for analyzing community attitudes and for selling these programs. What are some effective techniques for these kinds of relationships?

The broad question of how to best reach a community arises. Should we place our emphasis upon television, radio, the newspaper or other mass media? Should we adapt the anthropological model of the participant observer and rely on these observers to provide feedback to us from the community and from us to the community? Some schools have effectively developed a sort of ombudsman role. Members of the minority groups are asked to nominate individuals to serve this function. These nominations are in turn reviewed by the "establishment" and a selection made. This procedure has seemingly worked for some communities. Educational research, which took as its roots, information theory, group process and power structure could probably help find effective ways for meeting these kinds of problems.

ANNOTATED BIBLIOGRAPHY

BIBLIOGRAPHY

Adams, Evelyn C. American Indian Education. New York: King's Crown Press, 1946.

An attempt to present background history on "how the conflict between Indian and European-American culture has been resolved" is made by Adams. Mobility of the Indian population, impeded by illiteracy, language difficulties, and lack of technical skill seem to be the reasons for the failure to acculturate the Indians. There is a need for broadening puplic school programs, and the goal of the school should be to aid in the development of "healthy, literate, self-maintaining Indians."

Adkins, Patricia. "Teaching Idioms and Figures of Speech to Non-Native Speakers of English." Modern Language Journal. 52:148-152; No. 3. March 1968.

Lack of understanding of English idioms greatly handicaps students of Spanish background in developing reading skill in English. Formal instruction in idiomatic expressions should be given to these students when they are learning English.

Alatis, James. ed. Monograph Series on Languages and Linguistics. #21. Georgetown University School of Language and Linguistics. 1968.

The papers in this monograph represent the work of linguists who participated in the 19th Round Table discussion at Georgetown University. Linguists such as Stockwell, Moulton, Gleason and articles dealing with education of the American Indian child and contrastive linguistics and interference theory are represented.

Allen, Martin G. "The Study and Evaluation of Societies in Cross Cultural Research." International Mental Health Research Newsletter. 5:1-5; nos. 1-2. 1963.

Allen expresses the belief that the personality of a culture can be evaluated. He states, "personality is a reflection of the complete social process." Thus ratings and tests can be developed for the study of individual personality.

Altus, Grace T. "Wechsler Intelligence Scale for Children Patterns of Bilingual School Children." Journal of Genetic Psychology. 88:240-244. 1963.

This study attempted to determine if "alleged intelligence differences between monolingual English speaking children and bilingual children (various groups) were due to racial inferiority of the bilinguals, or if bilingualism interfered." The sample of the study was too small to actually determine this difference. A longer and more thorough test should be administered to get clear results.

Amsden, Constance. "Reading Program for Mexican-American Children, First Interim Report." ERIC.-Ed. 010 532. 1966. p. 10.

A program to develop oral language skills and to reinforce traditional cultural values of the Spanish-American community was designedby Amsden. Reading achievement and oral language development was assessed, and independent studies of the Spanish language proficiency of the children and Spanish influence on the children's oral English was undertaken. Emphasis on parent participation, individualized instruction, self-instruction, and cultural awareness was recommended to assure the children's academic progress and develop their sense of self-esteem.

Anastasi, Anne and DeJesus, Cruz. "Language Development and Non-verbal I.Q. of Puerto Rican Children in New York City." Journal of Abnormal and Social Psychology. 48:357-365; No. 3. 1953.

The greater the extent of adult contact in the home environment, the greater the dominance of the native language.

Anderson, Kenneth, et. al. Educational Achievement of Indian Children. Lawrence, Kansas: Haskell Institute Print Shop, 1953.

A survey of Indian students was made in 1946 and again in 1950. It was found that the white children tested with Indians consistently scored higher than the Indians in every area except free writing. The authors concluded that, "As cultural and educational backgrounds become more like those of white children in public schools, the more closely will educational achievement of Indian children match that of white children."

Andersson, Theodore. "Foreign Language and Intercultural Understanding." National Elementary Principal. 36:32. February 1967.

The bilingual needs to be proud of his heritage. The techniques studied in several school systems revealed that there are signs of better communication and improved attitudes toward non-English cultures. The studies also revealed that the bilingual children in these school systems seemed to become more literate in both the Spanish and English languages.

Ausubel, David. "Adults Versus Children in Second Language Learning; Psychological Considerations." Modern Language Journal. 48: 420-424. November 1964.

One of the basic assumptions underlying teaching a second langauge to pre-school children is they can learn more readily than adults. A different point of view is that adults can learn more readily because they have a larger native vocabulary and a more mature understanding of concepts. Adults are also capable of making generalizations and associations. Whenever teaching a second language, (1) pattern drills should be more meaningful; (2) written and spoken materials should be presented alternately and concomitantly, and (3) native speed should be slowed down to insure comprehension.

Barbosa-Da Silva, J. F. "Reference Orientation in an Ethnic Group of a Border Community." Proceedings of the Southwestern Sociological Association. Lubbock, Texas: Texas Technological College, 1966. pp. 49-61.

In viewing the family as a total unit, Barbosa-Da Silva studied a Southwestern community where approximately 70 per cent of the bilingual families were Mexican-born and 30 per cent were American-born. Formal education was the most significant factor in determining a positive orientation toward American society. Because of advanced formal education, the Spanish-Americans were in a higher income group and had more contact with the American Anglo culture than would otherwise have been the case.

Barker, George. "Growing Up in a Bilingual Community." The Kiva. 17: 17-32. 1951.

A brief survey of the influence of urban American culture on bilingual children on the west side of Tucson. The language of the home is Spanish. The process of Americanization is largely dependent on the public school and mass media.

Barrett, Donald N. and Samora, Julian. The Movement of Spanish Youth from Rural to Urban Settings. Washington: National Committee for Children and Youth, September 1963.

The implications and significance of this study are important to any discussion of the problems of acculturation. Several of the important points are clearly substantiated in that (1) Spanish-speaking members of the United States are a singularly disadvantaged group; (2) communication must be established to alleviate feelings of frustration and inadequacy; (3) Spanish leadership must be allowed to develop; (4) economic improvement is imperative, and (5) educational opportunities must be made available.

Beberfall, Lester. "Some Linguistic Problems of Spanish-Speaking People of Texas." Modern Language Journal. 42:87-90. February 1958.

Many Spanish-speaking people are plagued by these three problems:

1. Hyper-correction of ch and sh (the Spanish language is void of the sh sound).
2. Omission of the final tense.
3. The future tense.

Mere presentation of correct usage is not sufficient to inspire confidence in the learner. He is eager to be made aware of the effect of his words on native speakers of English. Drills and other methods of helping the Spanish speaker need further research.

Benham, William J. "Liaison: Key Word to School Program Completion." Journal of American Indian Education. Tempe, Arizona: Arizona State University. 5:26-30; No. 2. January 1966.

Benham studied the extent to which public schools that serve Indian students are involving community and parents in relationship practices.

The results indicated that better liaison practices are needed.

Bergan, K. "Secondary Schools and Acculturation of Indian People." National Association of Secondary School Principals Bulletin. 43:115-117; No. 249. October 1959.

The problems of over-population, lack of employment, and low income will be solved when the Indian becomes fully equipped to leave the reservation. The Indian must have the education and skills of non-Indians. This involves a cultural change and is measured more easily in generations than in years. To accomplish this goal the Indian should attend non-segregated schools where social learning occurs along with textbook learning.

Bernard, Walter. "Texts and Classroom Methods in a Bilingual Reading Course." Modern Language Journal. 36:3-9. January 1952.

Classroom texts and methods can be used effectively in a bilingual reading course. Graduated texts should be used, thus teaching cultural values and mores, as well as reading in the second language. Students can attain greater aural comprehension, be more interested and motivated, learn cultural value, gain independence from the teacher, learn inductively, become aware of total sentence structure, be exposed to correct models, and the program can allow for greater individual differences.

Bernardoni, L.C. "Apache Parents and Vocational Choice." Journal of American Indian Education. 2:1-9; No. 2. January 1963.

Bernardoni studied the historical, cultural, and environmental factors which affected the stated vocational preferences of male White Mountain Apache students. Less than half the sample consisted of boys having both parents assuming the parental role. Those parents who hoped their sons would leave the reservation were significantly more acculturated than those parents who desired their sons to remain on the reservation. The conclusion stated, "Apache parents play a minimum role in vocation selection."

Bernardoni, L.C. "Results of the TOGA with First Grade Children." Journal of American Indian Education. 1:24-29. June 1961.

The SRA Test of General Ability validity was checked by administeringthe test to Hopi first graders after each child was rated by a bilingual coordinator on the child's ability to speak English. The results showed a positive correlation between ability to speak English and the TOGA results.

Birkmaier, Emma. "Teaching of Foreign Languages." N.E.A. Journal. 50: 15-27. 1951.

The trends and techniques in foreign language teaching are discussed here. The optimum time for foreign language teaching is between the ages four and ten. Clearly defined objectives should be established in the program.

Blickenstaff, Channing. "Musical Talents and Foreign Language Learning." Modern Language Journal. 47:359-363; No. 8. December 1963.

Blickenstaff reviewed recent research which attempted to link pitch discrimination and language learning ability. In all reported studies, pitch was discriminated by a subtest of the Seashore Measures of Musical Talents. The studies indicated that pitch discrimination was related to auditory comprehension. Aside from timbre discrimination, there appeared to be no other investigations of the relationship of musical elements to language. Blickenstaff cites the need for more research and for the construction of reliable criterion measures of the student's skill in understanding and speaking a language.

Bloom, B. L. and Goldman, R. K. "Sensitivity of the WAIS to Language Handicap in Psychotic Population." Journal of Clinical Psychology. 18:161-163; No. 2. April 1962.

This study compared the WAIS scores of mainland (U.S.) and Hawaiian psychotics. The authors found that use of performance test scores as an intelligence index in language handicap cases was indicated by the results.

Boissevain, Ethel. "Detribalization and Group Identity. The Narragansett Indian Case." Transactions of the New York Academy of Science. 26:196-207; no. 2. 1963.

Boissevain studied the Narrangansett Indians and found that detribalization brought little disturbance if the tribe was not under heavy acculturation pressure.

Bossard, J. H. S. "The Bilingual as a Person--Linguistic Identification with Status." American Sociological Review. 10:699-709; No. 10. 1945.

The true bicultural-bilingual is an individual who participates intimately in two cultural systems. Bossard based his findings on seventeen case documents from psychoanalysis. He concluded that a bilingual goes through a complicated process of acculturation which, though different for each person, has definite effects on the personality.

Bowen, J. Donald. "A Comparison of the Intonation Patterns of English and Spanish." Hispania. 39:30-35; No. 1. March 1956.

In Spanish the intonation patterns differ significantly from the patterns in English. For example, in Spanish the pattern is normally 1211 and 1231. An example of the Spanish 1211 is "Para donde vamos." and the 1231 is "Habia muchos." The normal pattern in English is 2311 --"I live at home." In working with the bilingual, the teacher should avoid cross language patterns, avoid becoming mechanical in extensive drill, and correct intonation mistakes as they are made.

Briere, E. J. "Quantity Before Quality in Second Language Composition." Language Learning. 16:141-152; Nos. 3-4. 1966.

Copious writing experiences apparently aided in the second language learner's development of command in the second language. By never correcting more than two grammatical errors in one paper, an increase in quantity was accomplished with a decrease in error rate.

Briere, Eugene. "Phonological Testing Reconsidered." Language Learning. 17:163-171. December 1967.

Various methods of testing perception and phonological production are the subject of this study. Using two tests, an AX and ABX phonological paradigm, to measure subject bias and short term memory, the conclusion showed that prediction of phonological difficulties was not accurate.

Bright, William. Sociolinguistics. The Hague: Mouton, 1966.

The relationship between language and society; language as well as society as a structure, rather than a collection of items are discussed here. The task is to show the systematic covariance of linguistic structure. Causal relationship in one direction or the other are talked about as a possibility for future research. The book is a series of papers delivered at the UCLA Sociolinguistic conference in 1964.

Brodinsky, B. P. "Teaching Indian Children." Nation's Schools. 50: 35-38; no. 6. December 1952.

Federal Indian schools cover the minimum requirements of the courses of study in the states where they operate, but the courses are too strongly slanted toward life on the reservation. When studying in public schools, the Indian children seem to do better than Indian children in federal schools. Language difficulty is a factor that must be overcome. The problem is complicated by a mixture of Spanish and English within the Indian dialect.

Buell, Eleanor M. "Speech Improvement for Bilingual Children in Hawaii." National Elementary School Principal. 25:36-39. October 1946.

To help students of oriental background gain more confidence and precision was the aim of this author. Informal methodology (discussions in class without correction or criticism, except as written by the teacher) was used to achieve these aims:

1. To develop attitudes of willingness and freedom of expression.
2. To provide a variety of speaking situations -- conversation, dramatization, discussion, story telling, etc.
3. To provide corrective practice in distinctiveness and good pronunciation.

Burma, John H. Spanish-Speaking Groups in the United States. Raleigh, North Carolina: Duke University Press, 1954.

A comprehensive overview by Burma indicated that the Spanish-speaking minority groups have attempted, through language, to preserve La Raza. Programs in the economic, cultural, political, and social areas initiated with tolerance and understanding will aid these groups.

Cameron, Ann and Storm, Thomas. "Achievement Motivation in Canadian Indians, Middle and Working Class Children." *Psychological Reports*. 16:459-463; No. 2. April 1965.

Sixty-six elementary children from three sub-cultural groups (Indian, white middle class, and white working class) were given fifty trials in concept learning under material (candy) and non-material (light flash) rewards. White middle class students worked better than the other groups under non-material reward, but not under material reward. White middle class children preferred a larger, delayed reward to a small immediate one.

Caplin, Stanley and Ruble, Ronald. "A Study of Culturally Imposed Factors on School Achievement in a Metropolitan Area." *Journal of Educational Research*. 58:16-21; No. 1. September 1964.

Caplin and Ruble found bilinguals were not as dull as educators believe and that their achievement is affected by factors not directly evident within the school. Teachers and administrators must be made aware of this so that their expectation of these pupils and attitudes toward them are more favorable.

Carrow, Sister Mary Arthur. "Linguistic Functioning of Bilingual and Monolingual Children." *Journal of Speech and Hearing Disorders*. 22:371-380. 1957.

"Are bilinguals retarded in various aspects of linguistic function due to bilingualism?" Using 100 third grade children in four different schools as the sample, Carrow administered an English language achievement test. There was a significant difference between the achievement of the bilinguals and the monolinguals -- the monolinguals achieving at a significantly higher level in *oral* work (oral reading, hearing vocabulary, speaking vocabulary) only. There was no difference between the language groups where silent skills (silent reading, spelling, comprehension, etc.) were concerned.

Charles, Carol. "The Indian Child's Status in New Mexico's Public Elementary School Science Program." *The Indian Research Study, Final Report*. Albuquerque, New Mexico: University of New Mexico, 1960.

Retardation in science and reading was evident in all minority ethnic groups. Charles studied a sample of fifth grade Indian students to discover if this retardation was due to cultural conflicts. The response patterns suggested that this was the case.

Chomsky, Noam. *Topics in the Theory of Generative Grammar*. The Hague: Mouton, 1966.

The topics are a series of lectures which deal with a discussion of "(1) general background assumptions and goals that underlie and motivate much of the work in generative grammar of the past decade (2) various objections to this general point of view that seem to Chomsky to be based on error, misunderstanding, or equivocation of one sort or another (3) presentation of the theory of generative grammar (4) the real inadequacies that have been exposed in this position in work in the last half dozen years, and (5) sketches of a refined and improved version of this theory, designed to overcome these difficulties." The book includes an excellent section on phonology.

Christian , Chester C. Jr. "The Acculturation of the Bilingual Child." Modern Language Journal. 49:160-165; No. 3. March 1965.

Christian considered the effect that insistence on spoken English had on bilingual children. The problem of confusion and frustration which exists when a child learns one language and culture from his parents and then must learn another language and culture when he enters school is discussed. The author maintains that the term "acculturation" refers to the destruction of one culture to gain a second culture. He suggests that education should attempt to involve the culture of the child in his education instead of forcing the child to strip himself of the minority culture.

Cline, Marion Jr. Improving Language Arts of Bilinguals Through Audio-Visual Means. New Mexico Highlands University. Printed in Santa Fe, New Mexico by the author, 1962.

Improved teaching may result from the use of audio-visual aids in working with bilinguals. The results of a two year study using a supplementary audio-visual approach showed that the experimental groups gained more then the control groups, except in spelling. Fewer discipinary problems, a high level of interest, and longer retention seemed to be the greatest improvements through the audio-visual approach.

"Compensatory Education Project: Narrative Report, 1963-1964." Educator's Complete ERIC Handbook. Englewood Cliffs, New Jersey: Prentice Hall Inc., 1967. p. 147.

In attempting to give culturally disadvantaged students better education, field trips were provided to build experience and knowledge. The results of the study showed that the student's visual acuity and auditory perception had improved. Language pattern facility improved, and the children appeared to be more curious and to become more talkative.

Condie, Le Roy. An Experiment in Second-Language Instruction of Beginning Indian Children in New Mexico Public Schools. Albuquerque, New Mexico: University of New Mexico, 1961.

Condie posed the question, "Will curriculum elaboration and special teacher training cause a significant increase in the achievement of the Indian pupils in learning English and in readiness for reading?" Teachers were asked to use specially prepared techniques during the school year. The results of the post-testing showed that in three of the four groups there was a significant gain. The author concluded that individual school systems must define the scope of the bilingual problem and provide the type of assistance needed to aid teachers in teaching English to Indians.

"Beginning Indian Children." New Mexico Social Studies Education. Education Research Bulletin. 1:8-11. 1962.

An enrichment program of tape recorders, pictures, games, etc., produced high Indian pupil gains, thus validating the involvement of teachers in in-service programs.

Coombs, L. Madison. "Implications of Achievement Level of Indian Students." Annual Conference of the Co-ordinating Council for Research in Indian Education 1961. pp. 1-8.

Achievement of Indian students attending different types of schools (public schools, Bureau of Indian Affairs Schools, mission schools) was compared by giving them the California Achievement Tests. White pupils in public schools scored highest; Indian pupils in public schools were second; Indian pupils in Bureau of Indian Affairs schools were third; and Indian pupils in mission schools, last. It was concluded, "Only when Indian people are drawn into the mainstream of American life and culture on every social and economic front will differences in achievement disappear."

Coombs, L. Madison. The Indian Child Goes to School. Washington, D.C. Bureau of Indian Affairs, Department of the Interior. 1958.

In an attempt to determine how educational achievement of white and Indian children compare, how Bureau of Indian Affairs schools compare with public and mission schools, and how children in day schools compare with those in boarding schools, Coombs studies students from rural schools in New Mexico, Arizona, South Dakota, Montana, and Oklahoma. He found that in basic skills, Indian children were not as well prepared as are white students. Those who attended public schools achieved higher than those in federal or mission schools.

Cooper, James G. "Effects of Different Amounts of First Grade Oral English Instruction Upon Later Reading with Chamorro-Speaking Children (Guam)." Journal of Educational Research. 58:123-129; No. 3. November 1964.

Four elementary schools enrolling primarily Guamanian first grade pupils was the sample in a study by Cooper in which he sought to determine if the postponement of formal reading in favor of an oral readiness approach resulted in higher gains when considered over a four year period. Pupils were randomly assigned to a conversation, revised readiness, and experimental control class. At the end of the first year, both experimental groups excelled in ability to speak English. At the end of three years all groups were equal in their ability to comprehend aural English. At the end of four years, the control groups showed a small but significant lead in the ability to read as measured by the California Reading Tests. The differences were not educationally significant. The author recommends that new research based upon linguistic analysis of the Chamorro language be undertaken.

Cooper, James G. "Predicting School Achievement for Bilingual Pupils." Journal of Educational Psychology. 49:31-36. January 1958.

Four isolated communities in Guam were used to determine to what extent current measures of intelligence predicted school achievement in the bilingual children. Six intelligence tests were given to a stratified random sample of fifth graders. All intelligence tests correlated positively with California Achievement Tests. The study showed that the six tests predicted school success with a moderate to high degree of accuracy.

Dalbor, John. "Hearing and Pronunciation Problems for Speakers of Spanish Learning English." Language Learning. 9:67-73. 1959.

In working with an Hawaiian student, the author discovered that teachers often ignore the fact that before one can produce a sound correctly, he must be able to hear that sound. He must also be able to distinguish the sound from similar sounds in both the target language and his own tongue. One of the best ways of handling these linguistic problems is to anticipate them by making a thorough preliminary scientific comparison of the sound systems of the two languages. The most serious difficulties are then isolated and given special attention.

Darcy, Natalie T. "The Effect of Bilingualism upon the Measurement of the Intelligence of Children of Preschool Age." Journal of Educational Psychology. 37:21-44. January 1946.

The Stanford-Binet Scale and Atkins Test were administered to preschool children. The bilinguals were definitely superior on the Atkins Test, but the significance was too low to warrant substitution of one for the other.

Darcy, Natalie T. "Performance of Bilingual Puerto Rican Children on Verbal and Non-Verbal Tests of Intelligence." Journal of Educational Research. 45:499-506. March 1952.

This study of Puerto Rican children attempted to determine whether the Pintner Non-Language Test should be substituted for the Pintner Verbal Tests. After surveys had been made of 235 children in grades five and six who spoke both Spanish and English, it was found that the non-language test is more indicative of I. Q. and mental age.

Decker, Samuel. "Adapting Audio-Visual Techniques to Language Instruction." Modern Language Journal. 42:69-77. February 1958.

Popular music and classical music were used to help teach vocabulary and patterns of a second language.

Demos, George D. "Attitudes of Mexican-American and Anglo-American Groups Toward Education." Journal of Social Psychology. 57: 249-256; No. 2. December 1962.

A total of 105 Mexican-Americans, randomly chosen Anglos, and matched Anglos were tested. In every case, Anglos were judged to have what was considered the more desirable attitudes towards education. In the matched sample comparison, one case showed the Mexican-American student to have what was considered the more desirable attitude. The agreement between Mexican and Anglo-American was greater than the disagreement. Matching groups (Anglo and Mexican-American) reduced the number of attitude differences. However, six differences remained significant.

Diller, Edward. "The Linguistic Sequence in Learning Foreign Languages." Modern Language Journal. 46:259-260. October 1962.

The four skills in language learning are:

1. Listening: Preconditioning programs, language awareness of songs, poems, recorded speeches, listening for sound discriminations, comprehension, and significance.
2. Speaking: Mimicry-memorization, imitation, pattern drills, and spontaneous expression.
3. Reading: Recognition of patterns, contextual reading, reading in controlled situations.
4. Writing: Copying and matching exercises, writing from dictation, controlled writing, and free expression (essays, letters, and reports).

The program is most successful when done in the above order. It should not be hurriedly done.

Dudding, Christine Glass. An Investigation into the Bilingual Child's Comprehension of Antonyms. Albuquerque: University of New Mexico, 1960.

Academic failure often results from lack of understanding of the English language. When idiom and antonym tests were given, bilingual groups scored lower than Anglo groups.

Dworkin, Anthony G. "Stereotypes and Self-Images Held by Native-born and Foreign-born Mexican Americans." Sociology and Social Research. 49:214-224; No. 2. 1965.

Dworkin obtained stereotypes of the Anglo and self-images from 280 American-born Spanish and Mexican-born Spanish students and community residents. He found that significantly more Mexican-born subjects held favorable stereotypes and self-images. These findings were attributed to differences in the groups' definition of their present social situation as influenced by whether they employed their prior socioeconomic status or that of the dominant society as an evaluation standard.

Eells, Kenneth. "Some Implications for School Practice of the Chicago Studies of Cultural Bias in Intelligence Tests." Harvard Educational Review. 23:284-297. Fall 1953.

Caution should be exercised in using results of traditional test scores as predictors of success on non-English speaking children. Eells also advocates a new type of intelligence test and the development of individual potentialities.

Eells, Kenneth et al. *Intelligence and Cultural Differences*. Chicago, Illinois: University of Chicago, 1951.

A battery of standard I.Q. tests were given to 5,000 white pupils between the ages of nine and fourteen. The author was attempting to determine if the I.Q. differences among cultural status groups were due to the choice of items which presumably suit the majority. The conclusions were "Mean status differences are largest for verbal and smallest for picture, geometric design, and stylized-drawing items." The most adequate performance explanation seems to be the testees' familiarity with cultural words, objects, and processes.

Ervin, Susan M. "Learning and Recall in Bilinguals." *American Journal of Psychology*. 74:446-451. 1961.

"A bilingual may be said to be dominant in the language in which he has greater facility in naming objects." (p.446). In this research study, the author suggests that (1) the language of shorter reaction-time is the language of covert response when overt language is restricted; (2) covert responses in a different language from that used in the overt responses reduce recall in the latter language, and (3) spontaneous translation is more probable into the dominant language than into a second language. The test conclusions, given to Italian speakers, pointed out that the optimal recall-language is always the language dominant at the time of recall. All three of the hypotheses were correct.

Ervin, Susan M. and Landar, Herbert. "Navajo Word-Associations." *Journal of American Psychology*. 76:49-57; No. 1. March 1963.

This study attempted to ascertain the role of grammatical classes in association. Navajo women ranging from 17 to 70 years of age were used as the subjects. They were presented with 114 different grammatical class items, instructed to repeat each word, and add another word to each item. The level of commonality for primary responses was lower than those obtained from the sample of college students. Preferences for contrasts appeared and grammatical class responses depended on the class of the stimulus. Forward and backward associations appeared to be equally strong.

Evvard, Evelyn. "Results of the Bender-Gestalt Visual Motor Test Given in a Beginners' Class and First and Second Grades." *Journal of American Indian Education*. 3:6-10. May 1966.

A sample of 20 Navajo children in grades one and two were given the Bender-Gestalt Visual Motor Test, and the scores were compared to Kopitz norms. The means and standard deviations of the Navajos were similar to Kopitz norms.

Evvard, Evelyn and Mitchell, George C. "Sally, Dick and Jane at Lucachukai." *Journal of American Indian Education*. 5:2-6; No. 3. May 1966.

In seeking to find if the Scott-Foresman Basic Readers are adequate tools to teach Navajo children to read, Evvard and Mitchell discovered that these readers reflect middle class values of the white man. Differencesbetween white and Indian concepts and values with respect to animals, pets, human personality, human expression games, toys, and home cause minimum comprehension and maximum confusion. These concepts, alien to the Navajo, hinder content comprehension.

Feuerlicht, Ignace. "Popular Records in Spanish Classes." Modern Language Journal. 41:174-176; No. 4. April 1957.

Using songs as the subject matter, Feuerlicht discovered improvement in pronunciation and vocabulary development. The main advantage in using songs seemed to be increased interest and motivation.

Finocchiaro, Mary. "Bilingual Readiness in Earliest School Years, A Curriculum Demonstration Project." ERIC. Ed. 012 903, p. 28.

Two New York schools, one in a poverty area and one in a middle class area were chosen as the samples in a study by Finocchiaro. A two-year experimental program was conducted to develop "bilingual readiness" in kindergarten and first grade. Efforts were made to choose kindergarten and first grade classes composed of equal numbers of Negro, Spanish-speaking, and "other" children. Ability and I.Q. were not considered. In an environment where Spanish was used 65 per cent of the time, the children were encouraged to respond in both English and Spanish. The Spanish-speaking children gained more self-confidence and cultural awareness. There was also greater acceptance by the children and their parents in second language learning.

Fischer, John L. "Social Influences on the Choice of Linguistic Variant." Word. 13-14:47-56. 1957-1958.

Studying the use of "in" and "ing" as past participle endings in the speech habits of rural New England speakers was the purpose of this study. The conclusions of the study have bearing on the case of the bilingual's acquisition of language. The idiolects (dialects) of higher prestige (those using the "ing" endings) carry the impetus for linguistic change. Often emphasis is placed on the prestige dialect to call attention perhaps, to the speaker's knowledge of the "correct" pronunciation. Comfortable use of the "prestige language" may indeed be the goal of the bilingual learner.

Fishman, J. A. "The Status and Prospects of Bilingualism in the United States." Modern Language Journal. 49:143-155. 1965.

Cultural pluralism may determine the success of this country. In this study, bilingualism and biculturalism are discussed. The author suggested that a commission on bilingualism and biculturalism be established at the federal, state, and local levels.

Fishman, Joshua A. "Bilingualism, Intelligence, and Language Learning." Modern Language Journal. 49:227-237. April 1965.

Relationship between intelligence and bilingualism was studied. The author states that over half the world is bilingual, preferring the definition of bilingualism which refers to a cross cultural phenomenon rather than to separate points of departure. He concluded that the problem of bilingualism is quite complicated. There is no relationship between bilingualism and intelligence except that those bilinguals who are well-educated tend to excel in tests of verbal intelligence.

Unless political, social, cultural, and economic variables are controlled, no conclusions may be drawn concerning the relationship between bilingualism and intelligence.

Fishman, Joshua. Readings in the Sociology of Language. The Hague: Mouton, 1968.

The sociology of language represents one of several recent approaches to the study of the patterned co-variation of language and society. The primary purpose of this book is to interest students of social behavior in the language determinants, concomitants or consequences of that behavior. It is divided into sections which give the reader a perspective on the sociology of language, in a broad sense. A more sophisticated handling of sociolinguistics, studies concerned with social stratification, cultural values, multilingualism, and a general overview of social contexts and consequences of language planning are included in the book.

Floyd, David O. "Comparison of Standardized Test Results of Indian and Non-Indian in an Integrated School System." Journal of American Indian Education. 1:8-17. June 1961.

"Do the Indian students at Mesa Public Schools achieve at the same academic and intellectual level as the non-Indians?" It was concluded that the Indian students' scores were significantly lower.

Fonaroff, Leonard S. "The Trouble with the Navajo." Johns Hopkins Magazine. 13:14-31. December 1961.

Fonaroff examines the problem of the failure of the federal government to improve the situation of the Navajo Indian. Cultural misunderstanding is the cause of the majority of the problems between the government and the Navajos. For example, in the Navajo culture, once a law is made, it must be kept and not changed. The United States government has been known to amend its laws from time to time. To the Navajo this is a sign of weakness. The author concludes that we need to learn more about the Navajo and adopt new policies in dealing with the Navajo.

Foss, D. K. "An Analysis of Learning in a Miniature Linguistic System." Journal of Experimental Psychology. 76:450-459. June 1968.

An importance of system in learning a language is stressed. Apparently the learning mechanism evaluates and uses the systematic aspects of the learning task. The use of system enables a second language learner to more clearly grasp the components of the language.

Foster, Dorothy and Williams, Clarence. "Aural-Oral Written Versus Aural-Oral in Teaching Spanish to Fourth Graders." Modern Language Journal. 44:153-157. April 1960.

This study attempted to determine if the introduction of the written word soon after the oral word aided or hindered pronunciation, comprehension, and vocabulary retention of children starting Spanish in the fourth grade. The experimental group was exposed to written words on dittoed sheets, and the control group saw no written symbols. There were no significant differences in comprehension and vocabulary skills between the groups.

Fries, Charles. "Investigation into Language Learning." *Language Learning*. 2:89-100; No. 3. July-September 1949.

The article surveys and evaluates the methods of second language acquisition. The major assumption at the time of this writing was that a second language, like a first, is most naturally acquired in its spoken form. The ear and tongue trained first, then the eye. Fries states that many of the problems could be lessened if

(1) "more complete descriptive analysis of languages were taught and systematically compared with parallel analysis of English (recently, this practice has been discouraged)
(2) practical tests that are valid instruments for measuring the various areas of linguistic ability should be administered to enable educators to obtain meaningful score norms."

Fries, Charles C. and Pike, Kenneth L. "Coexistent Phonemic Systems." *Language*. 25:29-51; No. 1. 1949.

Although two systems or languages may exist simultaneously, they must remain as two separate languages. Each system is observable and describable, yet unique and must be discussed in terms of its own traits without comparison with any other system.

Gaardner, Bruce A. "Teaching the Bilingual Child: Research Development Policy." *Modern Language Journal*. 49:165-175; No. 3. March 1965.

Bilingual children often do poorly in classes which formally study the bilingual's native tongue. If the students do poorly perhaps it is the teacher's fault. The teacher may feel inferior to the students and demand too much. The teacher must be willing to accept the child's idiolect (the child's own dialect) rather than forcing him to adhere to the dialogue of the textbook.

Garber, Malcolm. *Classroom Strategies: Culture and Learning Styles*. Albuquerque, New Mexico: Southwestern Cooperative Educational Laboratory Inc., 1968. pp. 1-40.

Three recommendations are made in dealing with learning styles of ethnic groups. More emphasis on auditory perception should be practiced with Indian students. Word concepts, grammar and verbal expressionshould be more carefully developed. Schools should establish better communication with parents.

Gibbons, Melba Lee. *An Analysis of the California Achievement Test Scores Given to the Sixth Grade Pupils in the White Public Schools of Saint Mary Parish, Louisiana*. Albuquerque, New

The California Achievement Test was administered in St. Mary Parish, Louisiana to French-speaking pupils. Test was correlated with sex, foreign language background, family income, and education of parents. French-speaking pupils were significantly lower in reading vocabulary and comprehension. Parent education correlated very highly with achievement.

Gonzales, Eugene. "Mexican-American Parents Respond to Bilingual Questionnaires." California Education. 3:10-12; No. 1. September 1965.

Minority-group parents, long felt to be uninterested, are, in fact, interested and very willing to express their opinion of school programs especially when interviewed or questioned in their own language.

Gumperz, John J. "Types of Linguistic Communities." Anthropological Linguistics. 4:28-40. 1962

One of the key problems in ascertaining valuable information about linguistics and social behavior is that the study of these two features is rarely based on comparable sets of data. This anomaly is perhaps due to the difference between the objectives of studies of this type. "Linguistic Community" is discussed here in terms of monolingual or multilingual groups bound by "frequency of social interaction patterns and set off from surrounding areas by weakness in the lines of communication." (p. 31). The three different communities discussed are (1) regional dialects used for communication in market places, and media for intergroup communication, (2) language for use in the social and occupational community, and (3) linguistic use of the sacred and administrative codes. Whether monolingual or bilingual, these three communities exist in language use.

Gurren, Louise. "A Special Project for Teaching Speech to Transitory Puerto Rican High School Students in the City of New York." Speech Teacher. 32:148-150; No. 2. March 1958.

A gain in confidence and security by 83 Puerto Rican high school students was the outcome of this study. The objective of the project was to improve the competence of Puerto Rican high school students in using English in their subject-area (speaking, reading, and writing) classes.

Hakes, David T. "Psychological Aspects of Bilingualism." Modern Language Journal. 49:220-227; No. 4. April 1965.

Bilingualism may be psychologically disadvantageous to children. Second language learning apparently interferes with complete acquisition of the native language as observed in preschool children.

Evidence indicated that an individual who has acquired one response to a particular stimulus word and is attempting to acquire a second response to the same stimulus will experience a "negative transfer" situation -- the new learning will be more difficult than if there had been no previous learning. The bilingual is faced with the problem of "discriminating audiences." The child who is punished for speaking Spanish at school (or English at home) soon remembers not to make the same mistake and is likely to stop talking altogether. There is much evidence that interference and negative transfer are more common with the bilingual than with the monolingual student.

Hanson, Earl and Robinson, Alan H. "Reading Readiness and Achievement of Primary Grade Children of Different Socio-Economic Strata." The Reading Teacher. 21:52-57. October 1967.

Scores by the advantaged on the Goodenough Draw-A-Man Scale, Metropolitan Readiness Tests, and the Metropolitan Achievement Tests were significantly higher on each test than were scores of the disadvantaged.

Harter, Helen. "English is Fun, or the Rhythm and Song Approach to the Teaching of English to Non-English Speech Beginners." ERIC. Ed. 015 035, 1960. p. 92.

An interesting approach to teaching English as a second language to beginning students is outlined in this study. Drills, songs, games, dances, and nursery rhymes are utilized.

Haugen, Einar. "Problems of Bilingualism." Lingua. 2:271-290; No. 3. August 1950.

Social pressure becomes language pressure when one moves from one linguistic community to another. Linguistic conformity takes place when the learner has acclimated himself to the new environment. This article points out that the bilingual, in the process of learning, goes from "erratic substitution" to "systematic substitution" as he becomes more proficient in the new language.

Havighurst, R. J. and Hilkevitch, R. R. "The Intelligence of Indian Children as Measured by a Performance Scale." Journal of Abnormal and Social Psychology. 39:419-433. 1944.

This study sought to determine how Indian children of eleven communities perform on the standard achievement and intelligence tests. It was concluded that a performance test of intelligence is more valuable for eductional placement than one which requires much use of the English language. The statement that Indian children work more slowly than white children was disproved as a result of the study.

Havighurst, Robert J. "Education Among American Indians: Individual Cultural Aspects." The Annals of the American Academy of Political and Social Science. 311:105-115. March 1957.

Havighurst stated that Indian children have the same mental equipment as white children, but their cultural status and experiences caused them to rank lower on educational achievement tests, especially in high school subjects. This lower achievement is attributed to the cultural norms of cooperation, accepted by Indian students, as opposed to the Anglo norm of competition.

Hayden, Robert G. and Fishman, Joshua A. "The Impact of Exposure to Ethnic Mother Tongues on Foreign Language Teachers in American High Schools and Colleges." Modern Language Journal. 48:262-274. May 1964.

The study was conducted to find out how frequently the foreign language teachers in American high schools and colleges of a linguistic-ethnic background are congruent with the specific language they taught. The data presented indicated that foreign language teachers express positive attitudes toward language maintenance efforts of American ethnic groups. More than three quarters of the teachers surveyed expressed interest in utilizing the resources of ethnic groups for instructional purposes.

Henderson, Norman. Study of Intelligence of Children of Mexican and Non-Mexican Parentage. Occidental College, 1948. Master's Thesis.

Spanish-American children had consistently lower mean I.Q.'s than Anglo children. The differences increased as the children gained in age and grade level. Questionable reliability exists due to lack of prediction of later scores of the Spanish-American children. A vocabulary deficiency and lack of motivation may have caused the lower scores of the experimental group.

Herr, Selma E. "Effect of Pre-first Grade Training Upon Reading and Reading Achievement Among Spanish-American Children." Journal of Educational Psychology. 37:87-102; No. 2. February 1946.

Herr worked with two groups of five-year olds. The control group did not attend school while the experimental group went to school an extra year with emphasis on language and visual and audial perception. Within a two year period, the experimental group showed significantly greater reading achievement.

Hess, Stephen Grant. A Comparative Study of the Understanding Which Bilingual Students Have of the Multiple Meanings of English Words. Albuquerque: University of New Mexico, 1963. Master's Thesis.

The effect of multiple meaning English words on bilingual Indian and Spanish-speaking children was compared with their effect on monolingual English-speaking children. There was a significant difference in the achievement of the Spanish and Indian children compared to the Anglos, who achieved at a higher level than the other groups. The conclusions drawn from this study are:

1. Bilinguals need a better understanding of words in context.
2. Further studies are needed to explore the effects of multiple words on various groups.

Higa, Masanor. "Psycholinguistic Concept of 'Difficulty' and 'Teaching of Foreign Language Vocabulary'." Language Learning. 15:167-177; Nos. 3-4. 1965.

The learner's past and present learning experiences determine the ease or difficulty the bilingual has in learning the second language. The five factors which relate relationships among words learned and words to be learned are:

1. The intrinsic difficulty of the word.
2. The interaction between the new word and the word already learned.
3. The interaction within words learned at the same time.
4. The interaction between words learned in a sequence.
5. The effect of repeated presentation of words to be learned.

A relatively large number of repetitions is necessary to produce effective verbal learning.

Hill, Archibald. "Language Analysis and Language Teaching." Modern Language Journal. 40:335-345. 1956.

Several books and texts specifically written for instruction of bilinguals are available. A good text book should have these characteristics:

1. It uses technical terminology but explains it accurately.
2. It deals thoroughly with accent and intonation.
3. It presents pronunciation in terms of the similarities and differences between the native tongue and the new language.
4. It presents the sounds as they normally occur in that language, i.e., the sound /d/ in Spanish occurs after most consonants, and the /th/ sound between vowels.
5. It points out that oral drills should be at normal speed.

Hoenigswald, Henry M. "Bilingualism, Presumable Bilingualism, and Diachrony." Anthropological Linguistics. 4:1-5. 1962.

A discussion of the inequities between the common studies of linguistics (those dealing with the historical development of language) and the need for the study of "external history" (i.e. language change) is the purpose of this study.

Holland, William. "Language Barriers as an Educational Problem of Spanish-Speaking Children." Exceptional Children. 27:42-50. 1960.

In an analysis of language barrier as an educational problem to children, the WISC was translated into Spanish and administered bilingually resulting in an English verbal score/bilingual verbal score. Lack of English comprehension was a serious handicap to the educational adjustment in over forty percent of the 36 students tested. The conclusions are that language barrier is the result of lack of acculturation, not linguistic incompetence alone. Bilingual education is the recommendation to alleviate the problem.

Holland, William. "Method for Testing Bilingual Children with the WISC." Tucson Public Schools: Department of Guidance and Counseling. 1958.

An attempt to "define and analyze the social and cultural background of the educational problem" of 36 Spanish-speaking children was made by Holland. After administering the WISC, he found that all but three students had a language barrier. In the conclusion he noted that a language barrier exists when the subject is unacculturated and knows more Spanish than English. The bilinguals' scores were also low "because the Spanish family can offer its offspring fewer opportunities to develop proficiency in verbal skills. Aside from the language barrier, substandard verbal development of Spanish-speaking pupils is probably the result of being bilingual and having to forfeit a more thorough knowledge of one language for partial familiarity with two."

Horn, Thomas. "Three Methods of Developing Reading Readiness in Spanish-Speaking Children in First Grade." Reading Teacher. 20:38-42; No. 1. October 1966.

The need for developing suitable measures for assessing the capabilities, experiential background, cognitive functioning, and language levels of Spanish-speaking disadvantaged children is the conclusion Horn draws in his study of twenty-eight first grade classrooms. The purpose of his study was to ascertain whether there was a significant difference among the mean reading readiness scores of three groups undergoing different methods in instruction. The three approaches were the oral-aural approach in English, the oral-aural approach in Spanish, and a non-oral-aural approach. The study showed that utilization of the three approaches did not lead to significant differences in reading readiness.

Hoyer, Harry. "Linguistic and Cultural Change." Language. 24:335-345. 1948.

Language and culture are interrelated. People whose languages are related may have very different cultures. Culture areas result from traits of culture that are easily borrowed. Similarities in language are not due to borrowing but to a common linguistic tradition. Since language is an important part of the cultural pattern, changes in language must take place in response to cultural changes. Little or no information is available on the effect of semantic change upon the phonemic and grammatical patterns of a language. Studies are lacking on the processes of linguistic change and on the possibilities of relating these to the processes of change in the non-linguistic aspect of culture.

Hurley, Lucille S. "The Consequences of Fetal Impoverishment." Nutrition Today. December 1968. pp. 3-10.

Fifty years ago, birth defects were usually considered unfortunate quirks of Fate which were out of the control of man's knowledge and understanding. Since this time studies have been conducted which show that malnutrition does effect the growth of the fetus. Nutrition deficiency could produce congenital malformations. This study includes research in various aspects of kinds of malnutrition and the danger of poor nutrition to both the child and mother.

Ikeda, Hitoshi. "The Application of the Meaning Theory in Arithmetic in Selected Third-Grade Classes." The Indian Research Study. Albuquerque: University of New Mexico, 1960. pp. 189-205.

Ikeda used a sample of 259 Indian students to determine if arithmetic retardation could be reduced when language, culture, and experience were accommodated. Substantial gains in performance were noted, but the results appeared to be inconclusive.

"The Intelligent Bilingual." Educator's Complete ERIC Handbook, Phase One. Englewood Cliffs, New Jersey: Prentice-Hall Inc., 1967. p. 164.

Until recently, many research studies supported the conclusion that bilingualism produced confusion and resulted in an intellectual deficit. This study matched a monolingual and bilingual group on the bases of sex, socioeconomic class, and age. Both groups were tested extensively with intelligence tests and measures of attitude. The bilingual children were superior in intelligence, presented a greater mental flexibility, superiority in abstract concept formation, and, in general, possessed a more diversified set of mental abilities than did their monolingual counterparts. Bilingual children also had a more friendly attitude toward those whose language they had learned.

Jacobs, Roderick A. and Rosenbaum, Peter S. English Transformational Grammar. Waltham, Mass:Bleisdell Publishing Co , 1968.

Transformational grammar deals primarily with the study of the structure of the grammatical system of a language. Here the reader is offered a potpourri of information dealing with various levels of transformation, constituents and features of syntax and conjunction, to mention a few.

Jakobovits, Leon A. and Lambert, Wallace E. "Semantic Satiation Among Bilinguals." Journal of Experimental Psychology. 62: 576-582. 1961.

A heterogeneous group of English-French bilinguals were studied to determine the presence of "semantic satiation among bilinguals." The results of the tests showed that the compound (those with two functionally dependent language systems) exhibited a cross-satiation effect. The coordinate bilinguals (those with two functionally independent language systems) did not. Cross-satiation refers to the mixing and substitution of meaning in two languages. It is the apparent interference of one language on the other. The conclusions support the contention that coordinate bilinguals are less susceptible to the satiation effect than the compound monolinguals.

Jimenez, Carmina. Performances on English and Spanish Editions of the Stanford-Binet by Spanish-American Children. Albuquerque: University of New Mexico, 1951. Master's Thesis.

The author hypothesized that in measures of school achievement,

Spanish-speaking students underachieve due to the administering of intelligence tests in English. A Spanish translation and English Stanford-Binet were given to typical Spanish-American students. The conclusion was that the English form of the test was a better indicator of academic success.

Johnson, Charles E. and Flores, Joseph. "The Effect of Foreign Language Instruction on Basic Learning in Elementary Schools." Modern Language Journal. 47:8-11; No. 1. January 1963.

To allow for language instruction, other instructional periods of the school day were shortened. The purpose of this study was to see if the average gain in pupil achievement in basic skills was hampered. Ten fourth grade classrooms were used as the sample. The experimental group received twenty minutes of language instruction each school day. The students showed no significant loss in achievement in other subjects when measured by the Iowa Every-Pupil Test of Basic Skills.

Johnson, G.B. Jr. "Relationship Existing Between Bilingualism and Racial Attitude." Journal of Educational Psychology. 42:357-365; No. 5. May 1951.

In this study it was found that a profound knowledge of the Anglo culture or no knowledge of it yielded the least cultural prejudice. The attitudes of bilingual male students toward the Anglo culture were used to ascertain this.

Johnston, Marjorie C. and Ferrerira, Stella L. "Useful References for Teachers of Foreign Languages." Modern Language Journal. 41:308-312. November 1957.

Various types of reference materials such as records, books, reports, journals, film strips, charts, music, games, vocational opportunities, and information on other countries are available to the teachers of foreign languages.

Kaufman, Maurice. "Will Instruction in Reading Spanish Affect Ability in Reading English?" Journal of Reading. 11:521-527; No. 7. April 1968.

Kaufman questioned the effect of instruction in reading Spanish on reading ability in English of Spanish-speaking children who were retarded in reading English. Experimental (native Spanish taught in Spanish) and control groups at two schools received equivalent instruction in English. At school B -- where the experiment lasted two years -- there was evidence of positive transfer. There was no reliable evidence of interference at either school. Greater reading ability in Spanish resulted from direct instruction in reading Spanish than from unplanned transfer from English alone. The conclusions stated that planned transfer of learning from Spanish to English has some value for improving reading ability of English-Spanish bilinguals.

Kaulfers, Walter. "Bilingualism in Education: A Report on the International Seminar, Wales." Education Forum. 31:117-18. 1966.

Divergent opinions occur with respect to the effect of bilingualism on the development of intelligence. In "Bilingualism in Education" Kaulfers stated that a second language should be taught as a medium for enabling a learner to acquire knowledge about his real world. The report echoed a four hundred year old statement by Juan Luis Vives -- "No language is in itself worth the trouble of learning if nothing is sought beyond the linguistic aspect."

Keston, J. Norton and Jimenez, Carmina. " A Study of the Performance on English and Spanish Editions of the Stanford-Binet Intelligence Scale by Spanish-American Children." Journal of Genetic Psychology. 85:263-269. December 1954.

Should the Stanford-Binet Intelligence Test be translated into Spanish for Spanish-speaking students? After administering the test to fifty Spanish-Americans, significant differences emerged between test scores on the English and Spanish forms. Although it was believed that the English test does not give an accurate measure of intelligence, it was found that the English version provided a wider range of scores.

Kittell, Jack E. "Intelligence Test Performance of Children from Bilingual Environments." Elementary School Journal. 2:76-83. 1963-1964.

Sixty-six children, half bilingual and half monolingual from grades three and five, were given the S-Form of the C.T.M.M. and the California Reading test to ascertain if grade level, sex and chronological age effect their performance on the tests. The fifth grade children had a lower mean language mean average than non-language mean average. Third grade unilingual children had a higher language mean average than the bilingual children. Bilingual environments are a handicap in performance in intelligence measures during the primary grades, but could be an asset at the fifth grade level. The handicap is greatest for girls.

Kittle, J. E. "Bilingualism and Languages -- Non-Language Intelligence Scores for Third Grade Children." Journal of Educational Research. 52:263. November 1959.

The study is a comparison of the performance of bilingual and monolingual students on verbal and non-verbal intelligence tests relating socioeconomic status, foreign birth, sex and chronological age. The research tried to discover if reading ability was affected by differences between language and non-language scores or did reading ability effect such differences. Children with bilingual environments scored lower in mental maturity, but the investigation failed to reveal what effect this would have on achievement in school. It was concluded that teachers should examine mental maturity language scores rather than relying solely on I.Q. scores.

Klee, John. "Effective Practices in Secondary Foreign Language Teaching." Modern Language Journal. 45:207-211. May 1961.

The following are some effective teaching practices as observed by the author in the United States and abroad.

1. The entire class must be constantly encouraged to participate individually and in chorus.
2. All readings should be discussed in the foreign language, including first-year classes.
3. All "conversational questions" written in the textbook should be answered in writing by the students.
4. Using a rotation system, board work may be done each day by different members of the class.
5. Occasionally, questions based upon the text can be brought to class by each student, exchanged and then answered.
6. Frequently introduce "outside" material to the class.
7. Advanced students should be encouraged to write skits, poems, etc. and present them to the class.
8. Students should be responsible for a class presentation on a topic of interest.
9. Tape recording may be used effectively, allowing the teacher to give individual attention.
10. With advanced students, story-making can be done with each student adding a line.
11. Oral and written tests should be given after a lesson or unit.
12. Laboratory tapes can be used for reviewing aural comprehension, simulated dictation, question and answer, translation, and composition areas.
13. Have the students read silently when listening to commercially prepared records and tapes.
14. Movies, with the script should be utilized.
15. Two to four book reports in the second language should be presented both orally and in written form.
16. Letter-exchange programs should be utilized whenever possible.
17. Foreign language clubs should be established.
18. Newspapers and magazines should always be available.
19. Listening to the radio and television should be an important activity.

Knapp, Robert R. "Effects of Time Limits on Intelligence Test Performance of Mexican and American Subjects." Journal of Educational Psychology. 51:14-20. February 1960.

The Cattell Culture Free Intelligence Test, forms 2A and 2B, was administered to a Mexican and American sample to determine the effect of power and speed situations. The Mexican sample scored significantly lower mean scores in all areas than the American sample. The imposition of speed was significantly detrimental to the Mexicans' scores. Both groups, however, scored significantly higher on the second test, regardless of which test was administered first. All subjects appeared to be at a disadvantage when the speed test preceded the power test.

Knowlton, Clark S. "Patron-Peon Pattern Among the Spanish American of New Mexico." Social Forces. 41:12-17; No. 1. October 1962.

A major element in the Spanish American rural social organization was the patron-peon pattern. Although the pattern is now in the process of dissolution, the underlying cultural values remain and create many difficulties in the adjustment and acculturation of Spanish-Americans to the dominant English-speaking society of modern New Mexico.

Lado, Robert. "Linguistic Interpretations of Speech Problems of Foreign Students." Quarterly Journal of Speech. 46:171-175. April 1960.

A foreign student's inability to pronounce the /z/ sound (initially, medially, or finally) was used to illustrate some important conclusions about bilingualism. When the native language of the learner has one phoneme in a phonetic range where the target or goal language has two, the student tends to substitute his single phoneme for the two sounds of the goal language. For example, Spanish speakers have a tendency to add an intrusive vowel sound /e/ before clusters with /st/ changing the /st/ to /est/, thus states becomes estates.

Lambert, W. E. "Measurement of the Linguistic Dominance of Bilinguals." Journal of Abnormal and Social Psychology. 50:197-200. March 1955.

A group of college students and native French speakers were studied to assess the measure of linguistic dominance in bilinguals and to measure the degree to which one language is dominant over the other. Language dominance was related to cultural and personality traits. The better one knows a second language, the less time he will need to "translate."

Lambert, W. E., Havelka, J. and Crosby, C. "The Influence of Language Acquisition Contexts on Bilingualism." Journal of Abnormal and Social Psychology. 56:239-244. 1958.

The learning of two languages in two culturally distinctive contexts was studied in an attempt to discover if separate-culture learning enhances the learner's ability to use one language and then the other. If a bilingual has learned the two languages in culturally distinct contexts, the differences in meaning when translated from one language to another are increased.

Lambert, W. E., Havelka, J. and Gardner, R. C. "Linguistic Manifestations of Bilingualism." American Journal of Psychology. 72: 77-82. 1959.

In an attempt to determine the degree of correlation among various aspects of the bilingual's linguistic behavior, French and English bilinguals were used as the subjects. The closer the individual comes to achieving bilingual balance (equal competence in the two languages), the more capable the learner is of reading, speaking, and writing with equal fluency and speed in the two languages. It is interesting to note that if the learner is dominant in reading Spanish, for example, he will also show dominant characteristics in speaking and writing in that language.

Lambert, Wallace, "Developmental Aspects of Second Language Acquisition; Part I, Associational Fluency, Stimulus Provocativeness and Word-Order Influence." Journal of Social Psychology. 43:83-89. 1956.

In a discussion of psycholinguistic behavior and its effects on language learning, the author points out that the more advanced the learner, the less psycholinguistic interference occurs.

Lambert, Wallace. "Psycholinguistic Approaches to the Study of Language, Part II: On Second Language Learning and Bilingualism." Modern Language Journal. 47:114-121. March 1963.

Second language learning requires social-psychological changes which allow the learner to adopt gradually various aspects of behavior which characterize members of another linguistic/cultural group. The success with which the learner acquires the second language depends, in part, upon the ethnocentric attitudes and tendencies he holds with respect to the culture to which he is attempting to adapt.

Lancaster, Louise. "Introducing English, An Oral Pre-Reading Program for Spanish-Speaking Pupils." ERIC. Ed. 013 454. 1966.

A twenty-eight unit program for teachers of four and five year olds is presented. The use of this material resulted in the children gaining command of spoken English.

Langacker, Ronald W. Language and Its Structures: Some Fundamental Linguistic Concepts. New York: Harcourt, Brace and World, 1968.

As an up-to-date study of the nature and structure of language, viewed by modern linguists, this book is a basic study into the reason why language is worthy of study. Dialect geography, social attitudes toward language and writing, lexical items, the components of language organization, syntax, and phonology are discussed. The clarity of the book is due in part to the void of complex and technical discussions often found in books of this nature.

Leighton, Roby, ed. "Bicultural Linguistic Concepts in Education." Educator's Complete ERIC Handbook, Phase One. Englewood Cliffs, New Jersey: Prentice Hall Inc., 1967.

This article summarized the work of a workshop held in Tucson, Arizona. Educational objectives for Spanish and Indian students were developed at the workshop. Bicultural guidance involving both the teacher and the counselor was suggested. The teacher should realize that many culturally different students have a hopeless attitude because of a deep-seated sense of inferiority growing from their unsuccessful attempts of competing with Anglo-American students.

Intonation, pitch, juncture, and rhythm should be emphasized in oral communication. One of the major reasons Spanish and Indian students have difficulty with English is they experience basic confusion about the speech sounds of English when posed against their native tongue. Remedial programs should be built around this language difficulty.

Lennenberg, Eric H. Biological Foundations of Language. New York: Wiley, 1967.

"The book attempts to reinstate the concept of the biological basis of language capacities and to make specific assumptions so explicit that they may be subjected to empirical tests." It is a discussion rather than a presentation of the biological foundations of language.

Leopold, W. F. Speech Development of a Bilingual Child. A Linguist's Record. Evanston, Illinois: Northwestern University Press, 1949.

The subject matter of this book deals with a two year old's speech acquisiton of German and English. The volumes are in diary form, each new word and sound carefully recorded. There is obvious confusion noted in mixing the two languages. The author also talks about the observations he makes on Hildegard and Karla.

Leopold, Werner P. "Patterning in Children's Language Learning." Language Learning. 5:1-14. 1953-1954.

A study of his child's language acquisition of English and German from birth showed that often the child combined the two languages. Consciousness of dealing with two languages began early in the third year. The most striking effect of bilingualism was a "noticeable looseness of the link between the phonetic word and its meaning."

Lieberson, Stanley, ed. Explorations in Sociolinguistics. Sociological Inquiry. 36. Indiana University Research Center in Anthropology, Folklore, and Linguistics. 1967.

A series of articles is presented here to "bridge the gap between linguistics and the behavioral sciences." Perhaps the most important contribution sociology can make is through the application of its various intellectual perspective to the subject of languages, which range from ecological to the social psychological. The contributions in this journal make important points in the study of sociolinguistics.

Loretan, Joseph O. et. al. "Evaluation of Science Instruction in Spanish for Students of Spanish-Speaking Background -- Steps for Implementing Experimental Projects (For School Information)." ERIC. Ed 012 559. p. 48.

A science project with the purpose of fostering bilingualism, forestalling anticipated difficulties, and providing motivation and course requirements in high school is described by Loretan. Two seventh grade science classes of similar age, background, and abilities were given the same program in all respects but three. The experimental group received their instruction in Spanish -- and were given a course in the Spanish language. The two groups were then measured for progress in Spanish, science, English, and student attitudes. The results indicated an improvement in Spanish and science by those who received instruction in Spanish.

Lorge, Sarah. "Language Laboratory Research in the New York City High Schools: A Discussion of the Program and Findings." Modern Language Journal. 48:409-419. November 1964.

To determine if the teacher improves the teaching-learning situation by using language laboratories as a teaching aid was studied here. Over a three-year period, it was observed that the group utilizing the language laboratory showed impressive gains over the control group. The language labs were most effective when the teacher was enthusiastic and felt at ease in handling the equipment. The time given to lab, the type of equipment used, and the types of lesson-tapes used contributed to the success of the program.

Maberly, Norman. "The Validity of the Graduate Record Examinations as Used with English-Speaking Foreign Students." Educational and Psychological Measurement. 23:785-788; Part 2. Autumn-Winter, 1963.

An attempt to obtain empirical evidence of validity that would justify or preclude the use of and part of the Graduate Record Examinations for either total or contributory evaluations of the academic potential of English-speaking foreign students seeking entrance into American graduate schools is made. Grade point after two full semesters was correlated with the GRE scores. There was a high correlation between performance on the GRE and achievement in graduate school.

Macnamara, John, ed. "Problems of Bilingualism." Journal of Social Issues. 23; No. 2. April 1967.

As an excellent resource on the problems of bilingualism, this journal offers some of the clearest, competent work in this field. The selections and care taken in clearly explaining the problems of the bilingual child are to be commended: the journal is excellent.

"Malnutrition in Early Life and Subsequent Mental Performance." Dairy Council Digest. 39:13-16; No. 3. May-June 1968.

The purpose of this study is to present some current concepts of this subject, hypotheses being tested, and research approaches used. The discussion is involved in brain development and its reliance on proper nutrition to develop properly. In reference to a study in Guatemala, it was noted that mental retardation can occur at degrees of protein-calorie malnutrition associated with poor growth and is not limited to severe malnutrition. From the other research studies cited, it is clear that malnutrition does effect the mental development of the child.

Matias, W. "Teaching Spanish as a Foreign Language in Spanish Speaking Environments." Modern Language Journal. 42:399-401. December 1958.

A description of the methods used to teach non-Spanish speaking students Spanish at the Inter American University of Puerto Rico is discussed in this study. One innovation is the combination of English-speaking students studying Spanish with Spanish-speaking Puerto Ricans studying English in one large language class.

McCanne, Roy. "A Study of Approaches to First Grade English Reading Instruction for Children from Spanish-Speaking Homes." ERIC. Ed. 010 380. 1966.

This study compared three approaches to developing English arts skills, especially in reading, with first grade children from Spanish-speaking families. The treatments for English reading were basal reading, second language reading, and language-experience reading. These differing approaches resulted in no significant differences in reading achievement. Basal reading was favored with respect to reading readiness skills, attitude toward reading, and general reading achievement. All three methods had their advantages in the areas of oral achievement, writing fluency, and comprehension. Because of restrictions placed upon the study by the teacher and pupil population variables, the conclusions are tentative.

Mercer, Veta Walker. The Efficiency of the Bilingual Child in Understanding Analogies in the English Language. Albuquerque: University of New Mexico, 1960. Master's Thesis.

The results of this study indicated that Anglo students, who were used in both the control and experimental groups, achieved at a higher level than Indian and Spanish children. The study concluded that non-Anglo students need to develop skill in understanding English analogies.

"The Mexican American Education Committee of Metropolitan Los Angeles." ERIC. 1967. p. 47.

The following policies and philosophies for a bilingual education program were stated:

1. To accept the purposes of education in American democracy defined as basic principles by the Education Policies Commission.
2. To recognize the "culture within a culture" concept.
3. To recognize that the function of the school is to perpetuate the core values and institutions of the particular culture.

To aid in acculturation, bilingual teachers, counselors, and administrators should be hired.

Michael, John A. "High School Climates and Plans for Entering College." *Public Opinion Quarterly*. 25:585-595; No. 4. 1961.

Michael reported that college attendance rates could best be predicted through consideration of individual characteristics and ability, as well as family background. The high school climate does exert some influence.

Miller, Harold. "Indian Education." *ERIC*. Ed. 014 346, 1966. p. 10.

Indian education may be divided into four historical categories:

1. Until 1870 the policy was exclusion from national life.
2. Between 1870 and 1930, the policy was to remake the Indian in the image of the white farmer of rural America.
3. Between 1930 and 1960 there was a gradual shift to the aim of terminating federal responsibility for the Indian.
4. The objective of full participation by the Indian in American life, on and off the reservation, has developed since 1960. The major problems to be overcome are cultural differences, language barriers, and remedial education.

Montez, Phillip, et. al. "An Evaluation of Operation Head Start Bilingual Children, Summer, 1965." *ERIC*. Ed. 013 667, 1966.

This study showed that in California the Spanish-American is two years behind the Negro, and three and a half years behind the Anglo in scholastic achievement. Assimilation into our culture is made almost impossible due to the divergency of the Spanish culture in terms of the middle class values.

Morris, Joyce. *The Santo Domingo Program of Concept and Language Development*. Unpublished Doctoral Dissertation, Albuquerque: The Graduate School, University of New Mexico, 1963.

Morris's study was based on the premise that New Mexico Indian children are failing to achieve at a level commensurate with their innate ability because of inadequate language skills and a meager experiential background. Concrete experiences were provided so these students could relate concepts to the curriculum of the primary school. Fifteen field trips were planned to transport eighty children to illustrative places mentioned in primary grade social studies and science courses of study. The airport, a train ride, an apple orchard, the TV, radio stations, the telephone office, Zip Potato Chip factory, 7-Up Bottling Co., Winrock Shopping Center were included. ESL lessons were written for practice both prior to and following the field trip. Morris' primary concern was making use of pattern practice in teaching the subject matter of social studies and elementary science.

Morton, F. Rand. Statement in The Linguistic Reporter. Supplement No. 15, June 1965. p. 1.

As an objective of the bilingual program, the learner should be able to master the standard sound system and be able to demonstrate the use of discriminatory abilities similar to those of a ten-year-old native speaker.

Mullins, Martha Mersman. "The Personality Differences Between Unilingual and Bilingual Ninth Grade Students in a Depressed Area." Unpublished Master's Thesis, University of New Mexico, 1961.

Mullins found that unilingual males ranked significantly higher in areas of sociability, tolerance, and psychologicalmindedness on the Lorge-Thorndike Verbal and Nonverbal Intelligence Tests (Level Four) than bilingual males. However, the means of each group were similar. Female unilingual and bilingual means were even more alike. Where male groups fall below the national high school mean, female groups show greater deviation. Mullins' experiment suggests that a further study of personality effects on bilingual and monolingual students be conducted in connection with socioeconomic status and intelligence. These might be the important factors causing problems rather than bilingualism or biculturalism.

Nida, Eugene. "Approaching Reading Through the Native Language." Language Learning. 2:16-20; No. 1. January - March 1949.

Nida reviews the policies dealing with teaching reading to non-native speakers of English who live in the United States (Spanish, Indian). The article is primarily a historical overview of the kind of education and educational policies followed in educating these people.

Nida, Eugene. "Some Psychological Problems in Language Learning." Language Learning. 8:7-16; 1957.

Aside from learning another system of communication, second language learning is important because it aids the learner in understanding relevant characteristics of structure and pattern in human behavior. One of the major values acquired from analyzing one's own intonational pattern and comparing it with the intonational systems of other languages is the breaking down of unconsciously acquired prejudices against what are considered the "strange" characteristics of another language or culture.

Noel, Doris. "A Comparative Study of the Relationship between the Quality of a Child's Language and the Quality and Types of Language Used at Home." Journal of Educational Research. 47: 161-167. September 1953.

If the schools are to be given the responsibility of aiding the student in acclimating himself to another culture, we must assess the role of the school as an environmental factor. There is a definite relationship between the quality of language spoken by the parents and the children. The language habits of 84% of the children were determined by the parents' usage. If one language is dominant at home, the role of the school in creating competence in using the new or second language is compounded greatly by the unconscious resistance the learner brings with him toward learning the second language.

Norris, Mary Jane. "Linguistic Science and Its Classroom Reflections." Language Learning. 10:55-62; No. 1-2. 1960.

The elements of linguistic science are summarized in five points:

1. The realization of the nature of language.
    a. Language is vocal.
    b. Language symbols are arbitrary.
    c. Language has a system.
    d. Language is for communication.
    e. Language is made up of habits.
    f. There is a relation between language and the culture in which it is used.
    g. Language is dynamic.
    h. No two languages have the same set of patterns or pronunciation, words, and syntax.
2. The realization that the habitual patterns of one's language interferes with learning the patterns of another language.
3. Methods of analyzing and describing languages.
4. Descriptions of some languages.
5. Techniques for comparison of two languages.

Olsen, James. "Verbal Ability of Culturally Different." Education Forum. 29:280-284. 1965.

Schools must provide programs for culturally different children "because the responsibility for change is primarily with the school, not the child." To aid in this change, the author suggested:

1. Schools must develop an understanding of oral language development. Informal learning situations which are not structured or task centered must be created.
2. Curriculums should be established which challenge the learner to develop greater precision of meaning. The curriculum must be the medium through which the child develops and extends his language skills.

Oppenheimer, Max Jr. "The Bane of Our Linguistic Insensibility." Modern Language Journal 45:64-67. February 1961.

The average American is ignorant of the meaning, value, and role of many of the words he uses due to deficient grammatical training in our elementary and secondary schools. The English speaker is not aware of the literal etymological meanings of "loan translations." If the English speaker were better equipped to analyze the component parts, the structure, and the mechanism of his own language, he could more easily make comparisons between it and the language to be acquired.

Palomares, Uvaldo. "Assessment of Rural Mexican-American Students in Grades Pre-School through Twelfth." ERIC. Ed. 013 690, April 1967.

Research conducted on Spanish-American children has revealed that these students seem to fall progressively behind the normal student population. They have low self-concepts and feelings of inadequacy. Palomares confirmed this in his recent study.

Peck, Robert F. "Intelligence, Ethnicity, and Social Roles in Adolescent Society." Sociometry. 25:64-71. 1962.

Peck studied over 1200 adolescents in three Texas communities and found that ethnic factors decidedly bias the judgment of adolescents in these mixed communities. As early as the adolescent years, most Latin-American pupils adopt a deeply passive attitude toward the total community in which they live. They mirror and perpetuate the pattern of non-involvement in political or civic affairs which most of their parents demonstrate. This is not wholly a matter of social class.

Peters, Herbert D. "Performance of Hope Children on Four Intelligence Tests." Journal of American Indian Education. 2:27-31. January 1963.

The Weschsler Intelligence Scale for Children, the S.R.A. Primary Mental Abilities Test, the California Test of Mental Maturity, and Otis Alpha and Beta Tests were administered to Hopi Indian five-to-fifteen year olds. The Otis Alpha and WISC reported the highest scores. Verbal scores were consistent with academic achievement.

Pike, Eunice. "Test for Predicting Phonetic Ability." Language Learning. 9:35-42. Nos. 1-2. 1959.

This study reports the results of a pilot study designed to predict potential phonetic ability. Students were asked to mimic the teacher in making certain nonsensical and sensical sound clusters (pzk-nonsense, spo-sensical). The test was designed to determine the student's ability to control his vocal apparatus, take dictation, pronounce sound sequences, and to understand phonetic theory. The results of the post test showed a correlation of .7 which was significant at the .01 level.

Pike, Kenneth L. "Toward a Theory of Change and Bilingualism." Studies in Linguistics. 15:1-7; Nos. 1-2. Summer 1960.

The contrast between monolingual and bilingual users of a language is noted here. The relationship between change in system in general and the status of the language of the bilingual is the main object of this study. The terms "changed components" and "shared components" are used to illustrate the differences between the monolinguals and bilinguals acquisition of language. The phonetic differences may be dissimilar.

enough to constitute total change, or the phonetic signals are similar, thus shared. A "shared" unit implies the presence of a larger system embracing the two systems of the bilingual.

Pirtle, Wayne G. "A Multiple Response Device in Foreign Language Learning." Modern Language Journal. 48:39-40. November 1964.

Harry Stone and Charles Ostander developed an electronic testing device (MIRD). The possibilities for foreign language learning are discussed here. There is a switchboard and panel of lights at the teacher's desk which are visible to the students. Each student has a switch at his desk that corresponds with the teacher's panel. After asking a multiple choice or yes-no question, the teacher checks the panel to see which students answered correctly. Immediate reinforcement takes place because the student knows if he has answered correctly or not.

Politzer, Robert L. "On the Relation of Linguistics to Language Teaching." Modern Language Journal. 42:56-58. February 1958.

Concrete and practical application of linguistics to language teaching may alleviate some of the problems. "Applied linguistics" may be used and perhaps defined in the following:

1. Applied linguistics is the utilization in teaching of certain attitudes held by the majority. For example, the widespread practice of intensive oral drill in second language learning.

2. Applied linguistics may reflect the linguist's assumptions as to the nature of language.

3. The facts of the new language may be presented to students in terms of the findings of linguistic analysis.

4. The foreign language, as used by the learner, is subject to linguistic analysis.

5. A comparison of the linguistic analysis of the language of the learner with that of the language to be studied enables us to predict the difficulties the learner will encounter.

6. Linguistic analysis is of most relevance to the area of teaching methodology.

Pro, Sergio. "Problemes Methodologiques Relatits a la Differenciation Entre Signification Referentielle et Signification Emotive." L'Evolution Psychiatrique. 30:123-136; No. 1. 1965.

Problems of differentiation between deferential meaning and emotive meaning are based on:

1. Communicative or expressive use of language.

2. Conventionality, mutual consent, or empathetic recognition.

3. Identity.

4. Stability.

5. Definition of referential meaning.

Emotive, semantic structure consists of emotive atmosphere, emotive response, and situational emotive reaction.

Ramsey, Robert M. and Nattinger, James R. "Language Teaching in a Bilingual Environment." Language Learning. 15:61-65; Nos. 1-2. 1965.

The speaker of Spanish will undoubtedly have difficulty with certain sounds in English which are not present in his own tongue. The introduction to this section lists the phonemes which might be difficult for the bilingual student.

Rao, T. S. "Development and Use of 'Directions Test' for Measuring Degree of Bilingualism." Journal of Psychological Researches. 8:114-119; No. 3. September 1964.

The author developed a test to measure degrees of bilingualism consisting of 20 items to evaluate comprehension and direction-following. The split-half reliability was .73 and test-retest reliability .84. A correlation of cases between 20 bilingual and 20 Tamil subjects indicated validity. Analysis of variance showed sex and age differences to be significant at the .01 and .001 levels respectively.

Reed, Davis, Lado, Robert and Shen, Yao. "The Importance of Native Language in Foreign Language Learning." Language Learning. 1: 17-23. January 1948.

The problems which arise due to differences between the sound systems of the native language and foreign language are discussed. A phonetic test was administered to English, Chinese, Portuguese, and Spanish subjects. Most learning occurred when all of the subjects were from the same ethnic background rather than a mixture of the groups.

Regan, Timothy F. "TEFL and the Culturally Deprived." ERIC. Ed. 013 691, 1967

There are two problems identified in teaching culturally disadvantaged adults. The cultural disorientation of the learner and the complex problems of learning English as a second language are the major stumbling blocks to acculturation. An atmosphere which is sensitive to cultural differences and the adoption of programmed materials for the culturally different are seen as potentially useful new approaches.

Rivera, Carlos. "The Teaching of Spanish in the Second Grade of El Paso Public Schools." Hispania. 1953, pp. 450-453; 1954. pp. 493-496; and 1956. pp. 100-103.

The Spanish language and the Mexican and Spanish cultures have been taught in the El Paso, Texas schools since 1951. The emphasis is on oral development, but some reading and writing is done in the fourth and fifth grades. The teaching units are designed to motivate and create interest. They include such activities as home, community life, transportation, communications, school activities, health, and safety.

Robinett, Ralph F. et. al. "Biff and Tiff, *Miami Linguistic Readers*, Introductory Unit and Level One-A. Teacher's Manual." *ERIC*. Ed. 014 721, 1965. p. 27.

Each of the twenty-two texts prepared by a group of linguists for the Dade County Public Schools is accompanied by a seatwork booklet and a teacher's manual. The effectiveness of the series was not reported in the study.

Rohn, Ramona. *Improvement of Oral English in the First Grade in the Santo Domingo School*. Albuquerque, New Mexico: University of New Mexico Press, 1964.

The greatest need of the Indian child in New Mexico's schools is to become more articulate in English. Two Indian groups (Zuni and Santo Domingo) were given the Common Concepts Foreign Language Test. The Santo Domingo children were taken on field trips and exposed to new materials and procedures and then retested. Improvement of vocabulary and other gains were observed. Teachers must understand the difference between cultures and also understand the conflicts that arise because of these differences.

Rojas, Pauline M. "Instructional Materials and Aids to Facilitate Teaching the Bilingual Child." *Modern Language Journal*. 49:237-239. April 1965.

The classroom teacher of the bilingual needs materials in which the basic features of English are presented in teachable units. The material available is:

1. *The Fries American English Series*: These have been written to be used by non-English speakers who can read and write Spanish.

2. *English for Today*.

3. *Miami Linguistic Readers Series:* Basic reading texts for non-native speakers of English with Spanish background.

Rojas, Pauline M. "Reading Materials for Bilingual Children." *Elementary School Journal*. 4:204-211. 1956-57.

The vocabulary content of preprimers and primers were analyzed in three basic readers to seek evidence why these texts were unsatisfactory for teaching reading in English to bilingual children. The potential sources of problems combinations and usages were recorded. Random selection, the number, and irregularity of frequency of occurence were factors which limited the bilingual child's acquisition of English.

Rook, Luther W. An Application of the Semantic Differential to Bilingual Counseling. Albuquerque: University of New Mexico, 1959.

Rook conducted a study to determine if the dualistic frame of reference is significant in counseling communication and diagnosis. Five concept scales were selected for comparison of their meanings in English and Spanish. The degree to which these ratings tended to differ was taken as a measure of the difference of meaning between English and Spanish expressions of the selected concepts. A significant difference in the connotative meaning of some of the concepts existed. Perhaps the development of equivalent frames of semantic reference in the two languages is feasible.

Rosenblum, Abraham. "Ethnic Prejudice as Related to Social Class on Religiosity." Sociology and Social Research. 43: 272-278; No. 1. September-October 1958.

Economic differences and not ethnic grouping based on religion were found to be the basis for prejudice in adults. The higher the economic class, the more likely the presence of prejudice.

Russell, Harry J. "What is Readable and What is Not Readable in a Foreign Language." Modern Language Journal. 34:270-275. April 1950.

Children in grades one and two are most interested in reading and hearing about fanciful, supernatural, and unreal subjects. Senior high students, in contrast, are interested in "familiar experiences." If reading and listening experiences are to be of value, they must:

(1) Cater to the interests of the student.
(2) Contain a vocabulary which is neither too sophisticated nor too elementary.
(3) Have a new vocabulary word every 50-70 words.
(4) Have a high true cognate content.
(5) Be graded as to idiom content.
(6) Be graded as to syntax content.

Sanchez, George I. "Spanish in the Southwest." Educator's Complete ERIC Handbook, Phase One. Englewood Cliffs: Prentice Hall Inc., 1967. p. 46.

The Spanish-American society of five Southwestern states is discussed in this report. The basic problem of the schools is not linguistic but one of "social policy." The value of bilingualism and multilingualism to our relations with the rest of the world must be recognized. The following conclusions were drawn: Each learner will exhibit different effects when undergoing the process of acculturation, and the learner will feel more comfortable when teachers and administrators exhibit reasonable expectations and favorable attitudes.

Sapir, Edward. *Selected Writings of Edward Sapir in Language, Culture and Personality*. David G. Mandelbaum, ed. Berkley: University of California Press, 1949.

The writings of Sapir which "carry the gist of his thoughts" are selected to give the reader experience in discussions on language, culture, and the interplay of culture and person. The most valuable aspect of the book is the reference source it is in terms of an overview to the nature of language, and the cultural practice and habits of various cultures.

Saporta, Sol. *Psycholinguistics: A Book of Readings*. New York: Holt, Rinehart and Winston, 1961.

This book of readings explores the relationship between structural linguistics and the study of language represented by behavior psychology. The nature, approaches, and goals of linguistic theory are discussed here, as well as an important section on language acquisition, bilingualism, and language change.

Schroder, Glenn B. and Bemis, Katherine A. *The Use of the Goodenough Draw-A-Man Test as a Predictor of Academic Achievement*. Bureau of Research, Office of Education, U.S. Department of Health, Education, and Welfare.

Eighteen first grade classrooms in four public schools in a lower socioeconomic area of Spanish and Anglo background were given the Goodenough Draw-A-Man Test and the Lorge Thorndike Intelligence Test to determine the effectiveness of the GDMT. The results of the tests showed there was a significant difference in the performance of the two groups in certain areas of the I.Q. test, but there was no significant difference in their performance on the GDMT. The GDMT is not a successful predictor of academic success.

Scott, Charles T. "Linguistic Basis for the Development of Reading Skill." *Modern Language Journal*. 50:535-544. December 1966.

For the bilingual the problems of learning to read are complicated by the learner's inadequate command of the spoken language represented by the writing system, the nature of the writing system itself, and the relative adequacy of the writing system to the spoken language. A problem which compounds this is the learner's past conditioning to the graphic configurations of the writing system of his native language. Reading skill in a foreign language is a three-stage process: (a) oral reading drill; (b) controlled reading, and (c) free reading.

Shane, Harold G. *Linguistics and the Classroom Teacher*. Washington: Association for Supervision and Curriculum Development. N.E.A. 1967.

For one who has slight knowledge of what linguistics and its branches are, this book represents one of the finest, basic information sources available. The historical background, the use of linguistics in the classroom, and the review of linguistic literature are excellent and applicable to anyone who is interested in a clearer understanding of linguistics.

Shasteen, Amos E. Value Orientations of Anglo and Spanish American High School Sophomores. Albuquerque: University of New Mexico: 1967. Ed.D. Dissertation.

The cultural orientation or value system relied on in the Spanish American culture differs from that of the Anglo norm. When these non-native speakers enter a school environment , the orientations they bring with them are unrecognized and often intentionally discarded in an attempt to meet the demands of the majority society. This study examines the extent the value orientation of Spanish American students contribute to differences in school adjustment and achievement between Spanish American and Anglo sophomores in high school.

Shuy, Roger, ed. Social Dialects and Language Learning. Champaign, Ill: N.C.T.E., 1964.

The need for dissemination of information is quite necessary, in terms of social awareness of various cultures. This book includes studies in social dialectology, reports on field projects, reports on school and college teaching professions, social factors in learning standard English, reactions of related behavior sciences, and implications for future research.

Simirenko, Alex. "Socio-Economic Variables in the Acculturation Process -- A Pilot Study of Two Washo Indian Communities, Final Report." ERIC. Ed. 010 834. 1966.

Acculturation and the use of English in Washo Indians did not effect the educational level attained by acculturated and nonacculturated groups. More research is needed in this area, as Simirenko's conclusions were tentative.

Sisto, David T. " A Look at the Sequence of Skills in Language Learning." Modern Language Journal. 43:324-327. April 1959.

The place of writing in the sequence of language skills is examined in this study. The normal or usual order of teaching basic skills (aural, oral, reading and writing) is not always the most satisfactory sequence. Writing knowledge supplements the aural and oral knowledge. Some methods for developing the skills in writing are immediate dictation of materials just heard and the use of simple visual cognates.

Sizemore, Mamie. "A New Approach to Second Language Teaching." ERIC. Ed 011 210. 1962.

Instruction of Bilingual Children presents principles of modern linguistic science as they relate to the teaching of English as a second language. Some of the areas included in the revision of the 1939 edition are problems of bilingual children, importance of a friendly classroom climate, cultural conflicts, etc.

Skrabanck, R. L. and Mahoney, Mary K. "The Use of English and Spanish by Spanish-Americans in Two South Texas Counties." *Proceedings of the Southwestern Sociological Association, 1967*. Arlington, Texas: University of Texas, 1967. pp. 189-194.

The urban and rural bilingual exhibit differences in the Spanish and English usage in specific situations. Skrabanck and Mahoney found that the rural household head spoke more Spanish than his urban counterparts. Rural children used more Spanish than urban children. Children 18 and older used more English than their parents. In most cases the majority of urban and rural individuals preferred English mass communication media.

Smith, Alva Louis. *A Comparative Study of Facts and Factors Affecting and Effecting the Retardation of Bilingual Pupils*. University of Texas: Unpublished Master's Thesis. August 1952.

The causes of retardation in the Spanish-speaking bilingual pupil were investigated in this study. The results of the study showed that the Spanish-speaking child is retarded two years, and this retardation inhibts and stifles the academic performance of the child to the point it persists throughout his educational career. The bilingual is retarded in both mental and physical age. However, retardation is greatest with respect to verbal skills. The Spanish-speaking child does his best work in arithmetic. A major factor affecting retardation is absenteeism.

Smith, Madorah. "Measurements of Vocabularies of Young Bilingual Children in Both of the Languages Used." *Journal of Genetic Psychology*. 74:305-310. 1949.

Thirty Chinese and 62 English children ranging in age from 37 months to 77 months were given vocabulary tests. The results showed that only superior bilingual children were capable of obtaining the norms of the monolingual (English) children. It is perhaps unwise to begin teaching any but superior children in a second language during the pre-school years.

Smith, Madorah. "Word Variety as a Measure of Bilingualism in Preschool Children." *Journal of Genetic Psychology*. 82:143-150. 1957.

The purpose of the study was to determine the difference in the number of words per hundred used by children from bilingual homes as compared with children from monolingual homes. Again, Chinese and English children ranging in age from two to six were the subjects. The bilinguals scored lower on the test than those having primarily English or Chinese until after school attendance began. The bilingual was under a handicap that lessened with age.

Soffietti, James P. "Bilingualism and Biculturalism." *Journal of Educational Psychology*. 46:222-227. 1955.

Apparently no distinction was carefully made between bilingualism and biculturalism at the time of this writing. Recently we have become aware of the differences between these two concepts. This study delineates by definition the difference between bicultural and bilingual. The study includes a discussion of the various degrees and types of linguistic achievement and cultural growth.

Spang, Alonzo. "Counseling the Indian." *Journal of American Indian Education*. 5:10-15; No. 1. October 1965.

Spang reviewed the cultural aspects that must be taken into account when counseling Indian students. Indians have very little initiative or desire to change their lot. They have, as a group, a lack of information, no role models, and no reason for achievement. There is no desire to earn much money because relatives will move in. Indians are present-time oriented and have a lack of time-consciousness. The counselor must be careful not to force his value system upon the Indian.

Sparkman, Colley F. "A New Language Must Be Spliced onto One's Native Language." *Modern Language Journal*. 33:355-362. May 1949.

How an infant learns his language has never been clearly understood. Second language learning might be the process of "tagging" the new language onto the native tongue rather than attempting to imitate the manner in which the child has acquired the first language.

Spencer, Richard E. and Sequin, Edmond L. "The Relative Effectiveness of Earphones and Loudspeakers as a Means of Presenting a Listening Test in a Foreign Language." *Modern Language Journal*. 48:346-349. November 1964.

Two different methods of presenting a foreign language test were observed. The experimental group used earphones with individual volume controls, and the control group was instructed through the use of a loudspeaker. The performance on the listening test showed that the group using earphones did significantly better than those being instructed via the loudspeakers. No significant gains were made on the reading test. Serious consideration should be given to the communication media in which a language is taught and tested.

Spillane, James M. "Language Instruction Shows the Way." *N.E.A. Journal*. 53:25-26. May 1964.

Teachers should be given intensive training for seven or eight weeks in summer school. The training would include lectures, discussion of culture, demonstration classes, remedial drill sections, and plenty of teaching materials to take back to the bilingual classroom.

Stafford, Kenneth R. and Van Keuren, Stanley R. "Semantic Differential Profile as Related to Monolingual-Bilingual Types." *ERIC*. Ed. 012 455. 1967.

Semantic interference in the study of concepts is noted in this study. Navajo eighth graders were used as the subjects in an attempt to determine the semantic distances between monolinguals and bilinguals, and to determine the degrees of polarity. Given the concepts father, home, food, and me, the subjects were asked to discuss the meanings of the words. The first hypotheses was unsuccessful. Father is an almost alien concept to the Navajo, and we observe the interference of culture and environment in this case. The second hypotheses was substantiated by the findings in this study.

Stambler, Ada. "A Study of Eighth Grade Puerto Rican Students at Junior High School 65, Manhattan, with Implications for Their Placement, Grouping, and Orientation." National Association of Secondary School Principals Bulletin. 46:298-299. January 1962.

Stambler attempted to identify the social and educational needs of eighth grade Puerto Rican students enrolled in a Manhattan junior high school. The results of the study showed teachers felt that adequate placement and grouping would improve the teaching-learning situation. Many of the students indicated a need for improving human relationships, finding a job, getting educational and vocational guidance, and learning more about the customs of this country. A definite need to improve speech, reading, writing, and arithmetic was indicated.

Stockwell, Robert P.; Bowen, Donald J., and Martin, John W. The Grammatical Structures of English and Spanish. Chicago: The University of Chicago Press, 1965.

This is an excellent book which describes the similarities and differences between English and Spanish. It is a pioneer study in applied linguistics which represents an important step in the application of linguistic procedures to language problems. Word classes, verb forms, simple sentence transformations, and lexical differences are several of the major areas covered.

Sydraha D. and Rempel, J. "Motivation and Attitudinal Characteristics of Indian School Children as Measured by the Thematic Apperception Test." Canadian Psychologist. 5:139-145; No. 3. 1964.

Sydraha and Rempel attempted to assess attitudinal and motivational differences on the TAT between Metis-Indian and non-Indian children in Northern Saskatchewan. Differences between the two groups were clear for categories related to awareness of poverty.

Tanaka, Yasmuasa and Osgood, C.E. "Cross-culture, Cross-concept, and Cross-subject Generality of Affective Meaning Systems." Journal of Personality and Social Psychology. 2:143-153; No. 2. August 1965.

Subjects with contrasting linguistic backgrounds were asked to judge 24 perceptual signs on ten semantic differential scales. Four semantic factors -- dynamism, evaluation, warmth, and weight were found to be the most salient for perceptual signs. The structure of meaning spaces for perceptual signs differs from the structure of those for linguistic signs. Scales relations were stable across groups; however, between sample consistency was higher within language-cultural boundries than across them.

Thomas, Owen. *Transformational Grammar and the Teacher of English.* New York: Holt Rinehart and Winston, 1967.

In the introduction to the book, the author clearly states his position in this discussion of langauge. He maintains he is a pedagogue rather than a linguist. Therefore, the bulk of the information in the book deals with the use of transforms as an aid to the teaching of grammatical structures. It is considered a basic text for the teacher seeking more successful means of teaching grammar.

Tireman, Lloyd S. *The Spanish Vocabulary of Four Native Spanish-Speaking Pre-First-Grade Children.* Albuquerque: University of New Mexico, Publications in Education, No. 2. 1948.

This study explored the oral Spanish vocabulary of beginning school children. Four Spanish-speaking pre-first-grade children were surveyed. The vocabulary of the Spanish-speaking child is equivalent in length to his English-speaking counterpart.

Tucker, M. *Listening Lessons in Connected Speech for Puerto Rican College Students for the Purpose of Improving Aural Comprehension in English.* Albuquerque: University of New Mexico Press, 1963.

The effects of special training in overcoming listening difficulties are examined in this study. In all cases the experimental group of Puerto Rican students learning English showed improvement. The conclusions were that phonemic error tabulation and direct listening exercises and skills aid in the bilingual's acquisition of English. The study also pointed out that non-native speakers of English have greater difficulty in discriminating sounds in context, i.e. /pin/ /bin/ rather than in isolation /p/ /b/.

Tyre, C.A. "The Conventional Approach to Language Learning, An Evaluation and An Answer to Our Critics." *Modern Language Journal.* 36:59-64. 1952.

The flaws in the traditional reading-translation method of teaching are the reasons for failure of the conversation-only method are discussed here. The following ten devices can greatly increase the effectiveness of the teacher in language teaching: direct association by identification or enacting; exercises in linguistic relationships; recordings; dramatization; definition; questionnaires; expressing personal reactions; games; original paragraphs; reviews or dialogues; and extra-curricular aids. Success in language mastery is due to attitude, time alloted, and methodology.

Ulibarri, Horacio. Educational Needs of the Mexican American. Unit of the Education Resources Information Center of the Bureau of Research, U.S.O.E.

The paper attempts to examine the educational needs of the Mexican-American. Three general areas examined are: (1) occupational success; (2) citizenship participation, and (3) personality factors as they relate to education. The paper does not attempt to find solutions for these problems but rather focus attention on them.

Ulibarri, Horacio. "Social and Attitudinal Characteristics of Migrant and Ex-Migrant Workers -- New Mexico, Colorado, Arizona, and Texas." ERIC. Ed. 011 215, 1964.

Ulibarri studied the feelings of the migrant worker or the bilingual person who has not acquired a great deal of formal education. This attitudinal study was conducted with migrant workers in regard to family, health, economics, government, children, religion, and recreation. Conclusions were drawn:

1. "The sample showed present-time reward expectations in all areas.
2. Great timidity and passivity were shown in the areas of education, health, and economics.
3. Satisfaction was shown in family life although the nuclear family had in most cases replaced the traditional extended family.
4. They were futilitarian about the education of their children.
5. They showed tendencies of resignation to their economic status.
6. The sample showed definite ethnocentric tendencies."

Ulibarri, Horacio. The Spanish-American: A Study of Acculturation. Albuquerque: University of New Mexico College of Education, 1969.

A historical account of the cultural development of the Spanish-American is the substance of this work. The paper traces the development of this culture from the first half of the sixteenth century to present-day Spanish-Americans in Northern New Mexico.

Ulibarri, Horacio. Teacher Awareness of Socio-Cultural Differences in Multicultural Classrooms. Albuquerque: University of New Mexico Press, 1959.

Teachers and administrators need to be aware of sociocultural differences as they affect the bilingual. Ulibarri's study showed a general lack of teacher sensitivity toward sociocultural differences.

Valdman, Albert. "Toward a Redefinition of Teacher Role and Teaching Context in Foreign Language Instruction." Modern Language Journal. 48:275-284. November 1964.

A revolution has taken place in language teaching. Linguists have contributed a great deal to methodology and materials. The most important contribution is the linguists' theory that point of difficulty can be predicted and prepared for by comparing the structure of the native tongue to the language to be learned.

Valette, Rebecca M. "Some Reflections on Second Language Learning in Young Children." Language Learning. 14:91-98. 1964.

Using her own three year old son, the author was interested in observing his "undirected acquisition of French when immersed in that culture." The findings confirmed that the sound system of one's native tongue does indeed present a block in learning a new language.

Voegelin, C.F. "Culture, Language and the Human Organism." Southwestern Journal of Anthropology. 7:357-373. 1951.

The value in this study deals with the concepts of "culture" and the ramifications of the definitions in the study of culture. Without communication, culture dies. There are almost twice as many separate culture units as separate languages to be counted. A reference to culture is defined by Linton, 1945: "the sum total of behaviors of societies members that are learned and shared." Stewart, 1953 used the anthropological definition: "learned modes of behavior, socially transmitted from one generation to another within particular societies, which may diffuse from one society to another." The article makes some important and interesting points in dealing with culture.

Vogt, Evon Z. "The Acculturation of American Indians." The Annals of the American Academy of Political and Social Science. 311:137-146. May 1957.

Vogt outlines a conceptual framework for the analysis of American Indian acculturation in different areas of the United States; provides a brief synoptic review of the degree of acculturation in such areas; and discusses the limiting factors to full acculturation by comparing the situation of the United States with that of Mexico. He considers the development of "Pan-Indianism" as an emerging stage in the acculturation process.

Wardhaugh, Ronald. "Some Current Problems in Second Language Teaching." Language Learning. 17:21-27. July 1967.

A native speaker has abilities beyond those which may be accounted for in an observable, describable definition of language. For example, a native speaker has the ability to make judgments about such matters as grammaticality, foreign accent, synonymy, and paraphrase. Drills, are useful in a stimulus-response and reinforcement technique, but they are insufficient if used as the only method for language teaching. Motivational and personality variables are often overlooked in second language learning and teaching. These factors must be considered in language teaching because they are a major force in determining the success or failure of the program.

Weaver, Yvonne J. and Evvard, Evelyn C. "Helping Navajo Children Change Pronunciation Habits." Journal of American Indian Education. May 1966. pp. 10-15.

The purpose of this study was to teach young Navajos to hear and produce sounds in English. The sample consisted of Navajo students in grades four through seven who had been referred for remedial language problems. The teacher helped the students discriminate between Navajo and English sounds and drilled them in phoneme production and free conversation. The bilingual had mastered the target phoneme when he unconsciously retained new pronunciation habits. Hearing, differentiating, and reproducing English phonemes were the most difficult skills for these children to master.

Weinreich, Uriel. "On the Semantic Structure of Language." Joseph Greenberg, ed. Universals of Language. Cambridge: MIT Press, 1966.

The scarcity of relevant data, states Weinreich, is in itself a major obstacle to the elaboration of a workable hypothesis in discussing the semantic levels of language. A carefully written and thorough study is presented here exploring semantics in depth.

Witherspoon, Paul. "A Comparison of the Problem of Certain Anglo and Latin-American Junior High School Students." Journal of Educational Research. 53:295-299; No. 8. April 1960.

Witherspoon found a general lack of teacher sensitivity toward sociocultural differences of the bilingual. He also found there are really more likenesses than differences between Anglos and bilinguals. Teachers, counselors, and administrators need to be aware of the differences and the main problems.

Witherspoon, Y.T. "The Measurement of Indian Children's Achievement in the Academic Tool Subjects." Journal of American Indian Education. 1:5-9. May 1962.

"Can an experimental battery of tests measure the achievement of Indian children in tool subjects -- arithmetic computation, story problems, vocabulary, and reading?" The results from a battery of tests showed that an Indian child achieves at a lower level than his non-Indian peers. The gap between the group widened as the grade level increased. The entering Indian child is disadvantaged in every area measured. Test batteries should be assembled to measure achievement in tool subjects, but they should be relevant to the local achievement and analyzed through local norms.

Woods, Walter A. "The Role of Language Handicap in the Development of Artistic Interest." Journal of Consulting Psychology. 12:204-245. 1948.

One hundred men of many interests and of all levels of intelligence who were applicants for vocational guidance under the Service Man's

Readjustment Act were the sample for a study by Woods. He was seeking evidence which indicated that artistic interest is often developed as a result of a deficiency in the use of other symbols. A negative correlation existed between artistic interest and academic accomplishment measured in terms of grades completed in school and ability in the Army Alpha Test. A positive correlation existed between mechanical interest and artistic interest. The higher correlations attended lower levels of academic achievement. Counseling testimony indicated that low academic accomplishment was partly due to initial handicaps in the use of English. Apparently the artistic and mechanical interest developed because these men felt the need to express themselves and were unable to do so in an academically competitive high school situation.

Yamabuto, Kaoru. "Bilingualism: A Brief Review." *Mental Hygiene*. 48:468-477; No. 3. 1964.

Yamabuto demonstrated that means of measuring intelligence, the manner in which languages are taught, the age at which languages are acquired, the social prestige of the language, and the level of educational achievement of the individual are factors which are relevant to bilingual education.

Yandell, Maurine. *Some Difficulties Which Indian Children Encounter With Idioms in Reading*. Albuquerque: University of New Mexico Press, 1959.

Idiomatic expressions in English used in standard fourth, fifth, and sixth grade reading tests were analyzed to determine the efficiency of performance in various ethnic groups. The results of the multi-choice test of idioms showed that the groups understood the idioms in this order: Anglo, Spanish, Zuni Indians, and Navajo last. The reading level and the scores on the idiom test for the Anglo and Navajo showed a high correlation.

Yoes, Deck Jr. "A Reading Program for Mexican-American Children in Texas." *Reading Teacher*. 20:313-318. January 1967.

Several Title I projects are discussed in this article. A list of the various projects which have been done to aid the improvement of Spanish-American education in Texas is available.

Zintz, Miles V. *The Indian Research Study: Final Report.* Albuquerque: University of New Mexico, 1960.

Zintz attempted to identify the cultural and environmental influences on Indian children which must be understood for effective teaching, curriculum, teacher preparation, and parent understanding. Through teacher interviews, questionnaires, and diagnostic tests, he found that the Indian child in public schools is retarded culturally, verbally, and in scholastic achievement. Forced acculturation causes unacceptable reactions. Conflicts existed between cultures, environmental interpretations, values, and language concepts.

Zintz, Miles V. and Morris, Joyce. Tutoring-Counseling Program for Indian Students, 1960-1962. Albuquerque: University of New Mexico, 1962.

"Does a tutoring-counseling program offered to Indian students better attitudes and increase college achievement?" is asked by these two authors. Each of the 26 Indian students who sought counseling were given an informal acculturation questionnaire and an individual diagnostic reading ability test. It was concluded that (1) language and reading problems were the cause of low school achievement; (2) adherence to Indian values caused acculturation problems when the students tried to become part of the university community, and (3) a competent program advisement and counseling program were recommended and remedial reading classes teaching English as a second language are essential.

Zojonc, Robert B. and Wahi, N. Kishar. "Conformity and Need-Achievement Under Cross-Cultural Norm Conflicts." Human Relations. 14:241-250; No. 3. 1961.

Zojonc and Wahi studied the relationship between achievement and conformity in 30 male Indian students. Results indicated that the relationship was mediated by the instrumental value of the conformity. The high achievement group was more sensitive to the instrumental value of conformity than to norm congruence; the opposite was true in the low-achievement group.

Zurcher, L.A. et. al. "Value Orientation, Role Conflict, and Alienation from Work: A Cross-Cultural Study." American Sociological Review. 30:539-548; No. 4. August 1965.

The study by Zurcher also demonstrated that specific cultural values have a measurable impact on behavioral intent. Three groups (Mexican, Mexican-American, and Anglo-American) were matched and given particular instructions and a questionnaire packet containing biographical and employment questions, the Stouffer-Toby Role Conflict Scale, the Pearlin Alienation from Work Scale, and satisfaction-with-their-work questions. Contrasting value orientations were apparent.

SELECTED BIBLIOGRAPHY

SELECTED BIBLIOGRAPHY

Abbott, O.L. "Experiment in Oral Spanish." Modern Language Journal. 39:388-341. November 1955.

Abraham, Richard D. "Linguistics and Modern Language Teaching in Colombia." Modern Language Journal. 48:215-221. April 1964.

Abraham, Willard. "The Bilingual Child and His Teacher." Elementary English. November 1957. pp. 474-478.

Abraham, Willard. Guide for the Study of Exceptional Children. Boston: Porter Sargent Publishers, 1955.

"Across the Tracks." Time. 42:25. September 6, 1943.

Adams, D.A. "Materials and Techniques in Teaching English as a Second Language." Modern Language Journal. 41:376-383. December 1957.

Adelaide, Sister Ruth. "First Door to FLES." Modern Language Journal. 42:172-174. April 1958.

Adelaide, Sister Ruth. "FLES Specialist Teacher Program." Modern Language Journal. 50:492. November 1966.

"Advice to Language Learners." Modern Language Journal. 50:260-263. May 1966.

Agard, Frederick B. and Dunkel, Harold B. An Investigation of Second Language Teaching. Boston: Ginn and Co., 1948.

Aguilera, Francisco. "Hispanic Literature on Tape." Modern Language Journal. 44:296-302. November 1960.

Allen, Dwight W. and Politzer, Robert L. "Flexible Scheduling and Foreign Language Instruction." Modern Language Journal. 51:275. May 1961.

Allen, Edith M. "Foreign Language Below Ninth Grade: What Are We Doing." Modern Language Journal. 50:101. February 1966.

Allen, Edward D. "The Education and Re-education of Foreign Language Teachers." Modern Language Journal. 48:259. May 1964.

Allen, Edward D. "Effects of Language Laboratory on the Development of Skill in Foreign Language." Modern Language Journal. 44:355-358. December 1960.

Allen, Edward D. "How to Teach Students to Think in Spanish." Modern Language Journal. 42:139-141. March 1958.

Allen, W.M. "Spanish and German by T.V." Modern Language Journal. 40:139-142. April 1956.

Anastasi, Anne and Cordova, Fernando A. "Some Effects of Bilingualism Upon the Intelligence Test Performance of Puerto Rican Children in New York City." *Journal of Educational Psychology*. 44:1-19. January 1953.

Andersson, Theodore. "After FLES -- What?" *Education Forum.* 26:81. November 1961.

Andersson, Theodore. "An F. L. Blueprint in Focus." *Modern Language Journal*. 46:116. March 1962.

Andersson, Theodore. "FLES: A Clarification." *National Elementary Principal*. 43:61. September 1963.

Andersson, Theodore. "FLES and the Conservation of Our Language Resources." *Hispania*. 47:593-595. September 1964.

Andersson, Theodore. "From School to College in Foreign Languages." *N.E.A. Journal*. 53:35-36. April 1964.

Andersson, Theodore. "A New Focus on the Bilingual Child." *Modern Language Journal*." 49:156-160. April 1965.

Andersson, Theodore, and Starr, Wilmarth H. "The Teaching of Modern Languages and Intercultural Understanding." *Modern Language Journal*. 39:197-200. April 1955.

Andrus, Ethel Percy. "Workshop Studies: Education of Mexican Americans." *California Journal of Secondary Education*. 18:328-330. October 1943.

Anthony, Edward. "Importance of Native Language in Teaching Vocabulary." *Language Learning*. 5:109. 1955.

Arastch, Reza. "Interaction Technique of Teaching Foreign Languages." *Modern Language Journal*. 44:349-351. December 1960.

Arellano, Sonya I. "Reading Spanish in the Grades." *Hispania*. 50:335-338. May 1967.

Arsenian, Seth. *Bilingualism and Mental Development*. New York: Bureau of Publications, Columbia University, 1937.

Arsenian, Seth. "Bilingualism in the Post War World." *Psychological Bulletin*. 42:65-84; No. 2. 1945.

Arthur, Grace. "An Experience in Testing Indian School Children." *Mental Hygiene*. 25:188-195. April 1941.

Asamoa, E.A. "The Problem of Language in the Education of the Gold Coast." *Africa*. 25:60-78. January 1955.

Ashby, Lyle W. "Hawaiian Schools Build Interracial Friendship." *N.E.A. Journal*. October 1946. p. 400.

Atkinson, Rosa. Educational Retardation of Spanish Speaking Children and Recommendations for Remediation. Austin: University of Texas, 1953.

Babington, Suren H. "English was My Undoing." N.E.A. Journal. 55:16-17. February 1966.

Bachi, R. "A Statistical Analysis of the Revival of Hebrew in Israel." Scripta Hierosolymitana. 3:179-247. 1956.

Bain, Winifred. "Mother Tongue or Other Tongue." Parents Magazine. 17:26-27. March 1942.

Barclay, Lisa K. "Cognitive Verbal Learning Using English, Spanish and Bilingual Instruction with Mexican-American Head Start Children." ERIC. Ed. 010 726. 1967.

Barke, Ethel M. "Study of Comparative Intelligence of Children in Certain Bilingual and Monoglot Schools in South Wales." British Journal of Educational Psychology. Nos. 3;8. 1933; 1938.

Bates, Elizabeth A. "A Report of the Status of FLES Instruction in Texas." Hispania. 48:122-125. March 1965.

Beals, Ralph L. and Humphrey, Norman D. No Frontier to Learning: The Mexican Student in the United States. Minneapolis: University of Minnesota Press, 1957.

Beatty, Willard W. "Forty Thousand 'First Americans' Who Can't Speak English." N.E.A. Journal. 36:300. April 1947.

Beberfall, Lester. "Qualitative Aspect of Spanish Dipthongs." Modern Language Journal. 48:136-142. October 1964.

Beberfall, Lester. "Spanish Verb Forms by Conversation." Modern Language Journal. 47:103-106. February 1963.

Bell, Paul W. "A Beginning Reading Program for the Linguistically Handicapped." ERIC. Ed. 015 043. 1966.

Bellemin, George J. "Studying Earth Science in French." Junior College Journal. 35: December-January 1964-65.

Belliaeff. Alexander. "Understanding the Mexican-American in Today's Culture." ERIC. 014 365. 1966.

Benham, William J. "Liaison: Key Word to School Program Completion." Journal of American Indian Education. January 1966. pp. 26-30.

Berger, Marshall D. The American-English Pronunciation of Russian Immigrants. New York: Columbia University, 1951.

Berry, Mildred and Eisenson, Jon. *Speech Disorders-Principles and Practices of Therapy*. New York: Appleton, 1956.

"Bilingual Twins: A Modern Language Movement." *London Times Educational Supplement*. Friday, June 17, 1966. p. 649.

Bishop, G. Reginald, Jr. "Foreign Language Teaching -- Challenges to the Profession." Reports of the Working Committees of the Northeast Conference on the Teaching of Foreign Languages. *ERIC*. Ed. 014 934. 1965.

Bloomfield, Leonard. *Language*. New York: Henry Holt, 1933.

Blossom, Grace and Webb, Mary M. "Opening the Door: The Teaching of English as a Second Language." *ERIC.* 1967, p. 50.

Bogardus, E.S. "Changes in Racial Distances." *International Journal of Opinion and Attitude Research.* 1:55-62. December 1947.

Bonin, Adleyn I. "Language Laboratory Approach to Teaching English to Foreign Students." *Junior College Journal*. 3:104. October 1960.

Borrego, Eva R. "The American Child with a Two Language Heritage." *National Elementary Principal*. 25:32-35. October 1946.

Bostwick, Prudence. "They Speak the Same Language." *Progressive Education*. 19:25-29. January 1942.

Bratset, R.E. *Identification of Cross Cultural Problems in Reading English as a Second Language*. Berkley: University of California Press, 1962. Ph.D. Dissertation.

Brault, Gerald J. et. al. "Cours de Langue Francaise Destine Aux Jeunes Franco-Americans." *ERIC* 010 477. 1963.

Brazeau, E.J. "Language Differences and Occupational Experience." *Canadian Journal of Economics and Political Science*. 1958. pp. 532-540.

Brenes, Dalai. "Spanish and the Spanish Psyche." *Modern Language Journal*. 42:175-177. April 1958.

Brizee, Robert L. "Some Methodological Problems in the Study of Ethnic Stereotypes." *Proceedings of the Southwestern Sociological Society*. Baton Rouge: Louisiana State University, 1954.

Brooks, Melvin S. *The Social Problems of Migrant Farm Laborers*. Carbondale: Southern Illinois University, 1960.

Brooks, Nelson. *Language and Language Learning*. New York: Harcourt, Brace, and World. 1960.

Brown, R.W. and Lennenberg, Eric. "A Study of Language and Cognition." Journal of Abnormal Social Psychology. 49:454-462. July 1954.

Burbeck, Edith. "Problems Presented to Teachers of Bilingual Pupils." California Journal of Elementary Education. 6:49-54. 1939.

Burchill, George W. Work-Study Programs for Alienated Youth. Chicago: Science Research Associates, Inc., 1962.

Burma, John H. Spanish Speaking Groups in the United States. Durham, North Carolina: Duke University Press, 1954.

Buxbaum, Edith. "Role of Second Language in the Formation of Ego and Superego." Psychoanalytic Quarterly. 18:279. July 1949.

Cables, Virginia. "Pre-Reading vs. Post-Reading." Modern Language Journal. 45:252-254. October 1961.

Caldwell, Floyd F. and Mowery, M.D. "The Essay vs. the Objective Examination as Measures of the Achievement of Bilingual Children." Journal of Educational Psychology. 24:696-702. December 1933.

"Careers for Youth and the Mexican-American Community of Phoenix, Arizona." ERIC. 1967.

Carlson, H.B. and Henderson, N. "The Intelligence of American Children of Mexican Parentage." Journal of Abnormal and Social Psychology. 45:544-551. July 1950.

Cattell, R. et. al. "Culture Free Intelligence Tests." Journal of Educational Psychology. 31:161-180. 1940.

Chambers, Dwight. "The FLES Workshop in the College of Education." Hispania. 40:342-343. September 1957.

Chase, Stuart. Power of Words. New York: Harcourt, Brace and World, 1953.

Chastain, Kenneth and Woedehoff, Frank J. "A Methodological Study Comparing the Audio-Lingual Habit Theory and the Cognitive Code-Learning Theory." Modern Language Journal. 52:268-279. May 1968.

Chavez, Simon J. "Preserve Their Language Heritage." Childhood Education. 33:165-185. December 1956.

Christian, Chester C. Jr. "The Acculturation of the Bilingual Child." Modern Language Journal. 49:160-165. February 1965.

Christophersen, P. Bilingualism. London:Methuen, 1948.

Cioffari, Vincenzo. "What Can We Expect from the Language Laboratory?" Modern Language Journal. 45:3-9. January 1961.

Clark, M. and Barrett, E.S. "Critical Flicker Frequency in Relation to Cattell's Culture Fair Intelligence Score." American Journal of Psychology. 75:324-325. June 1962.

Clark, Margaret. Health in the Mexican-American Culture. Berkley: University of California Press, 1959.

Coale, Willis B. "Frequency and Type of Errors in Oral and Written English Made by Public School Children in Different Types of Schools." U.S. Office of Education Bulletin, 14:117-163. 1937.

Coale, Willis B. and Smith Madorah. "Successful Practices in Teaching English to Bilingual Children in Hawaii." U.S. Office of Education Bulletin. 14:1-113. 1937.

Cohen, Alan and Starkweather, J.S. "Vocal Cues to the Identification of Language." American Journal of Psychology. 74:90-93. March 1961.

Coindreau, Josephine. "Teaching English to Spanish-Speaking Children." National Elementary School Principal. 25:40-44. June 1946.

"Compulsory Welsh." Times Educational Supplement. 2192:694. May 1957.

Cooke, Henry W. "The Segregation of Mexican-American School Children in Southern California." School and Society. 67:417-421. June 5, 1948.

Cooper, Lloyd G. "Awakening at Socorro." Texas Outlook. 50:34-35. November 1966.

Cornfield, Ruth R. "The Other Side of FLES." Hispania. 49:495-497. September 1966.

Cullen, Arthur J. "Elbert Covell College: A New Kind of Spanish Language and Inter-American Area Center." Hispania. 47:788-794. December 1964.

Darcy, Natalie. "A Review of the Literature on the Effects of Bilingualism Upon the Measurement of Intelligence." Journal of Genetic Psychology. 82:21-57. 1953.

Dartigue, Esther. "Bilingualism in the Nursery School." The French Review. 39:577-587. February 1966.

Datel, W.E., Hall, F.D. and Rufus,C.P. "Measurement of Achievement Motivation in Army Security Agency Foreign Language Candidates." 25:539-545; No. 2. Summer 1965.

Davenport, Lee E. "The Intelligence Quotients of Mexican and Non-Mexican Siblings." *School and Society*. 36:304-306. September 3, 1932.

Davies, R.E. *Bilingualism in Wales*. Johannesburg: Juta and Co. Ltd., 1954.

Davis, Allison. *Social-Class Influences Upon Learning*. Cambridge: Harvard University Press, 1948.

Davis, Jack Henry. "Teaching Spanish in a Bilingual Area." *Hispania*. 40:206-207. May 1957.

Dawson, Mildred A. *Language Teaching in Grades One and Two*. New York: World Book Co., 1957.

Devereux, George. "Mohave Voice and Speech Mannerisms." *Word*. 5:268-272; No.2 . 1949.

Dillon, Myles. "Linguistic Borrowing and Historical Evidence." *Language*. 31:12-17. 1945.

Dixon, Robert. *Essential Elements in English*. New York: Regents Publishing Co., 1957.

Dizner, Henry. "Concurrent Validity of the Test of English as a Foreign Language for a Group of Foreign Students at an American University." *Educational and Psychological Measurement.* 25:1129; No. 4. 1965.

Dodson, C.J. "Foreign and Second Language Learning in the Primary School." *ERIC.* Ed. 013 025. 1966.

Doob, L.W. "The Effect of the Jamaican Patois on Attitude and Recall." *American Anthropologist*. 60:574-575. August 1958.

Doob, L.W. "The Effect of Language on Verbal Expression and Recall." *American Anthropologist*. 59:88-100. February 1957.

Dudek, J.B. "The Bohemian Language in America." *American Speech*. 2:466-472. August 1927.

Duncan, Melba H. "Personality Adjustment Techniques in Voice Therapy." *Journal of Speech and Hearing Disorders*. 12:161-167. December 1947.

Dunkel, Harold B. "The Investigation of the Teaching of a Second Language." *Modern Language Journal*. 29:323. April 1945.

Dunkel, Harold B. *Second Language Learning*. Boston: Ginn and Co., 1948.

DuPrey, Virginia. *Techniques of Minority Bilingual Groups*. New York: MacMillan Co., 1955.

"Each One Teach One." *N.E.A. Journal*. November 1945. p. 170.

Eaton, Margaret et. al. "FLES -- Yes!" *Modern Language Journal*. 41:373-375. December 1957.

Eckberg, Beatrice E. "Jamestown's Promotional Program in Spanish." *Hispania*. 37:70-72. March 1954.

Edgerton, Mills F. Jr. "The Study of Languages: A Point of View." *Liberal Education*. December 1965. p. 517.

"Effects of Bilingualism." *Times Educational Supplement*. 2221:1583. December 13, 1957.

Emerson, Rupert. *From Empire to Nation*. Cambridge: Harvard University Press, 1961.

Engelman, Siegfreid and Bereiter, Carl. *Teaching Disadvantaged Children in the Pre-School*. Englewood Cliffs: Prentice-Hall 1966.

"English as a Second Language for French Speaking Students in Secondary Schools." *ERIC*. Ed. 012 902. 1966.

Epstein, Erwin H. "Value Orientation and the English Language in Puerto Rico." *ERIC*. Ed. 010 108. 1966.

Ervin, Susan. "Language and Recall in Bilinguals." *American Journal of Psychology*. 74:445-451. 1961.

Ervin, Susan. "Semantic Shift in Bilingualism." *American Journal of Psychology*. 74:233-241. June 1961.

Estep, Hunter L. "The Carlsbad Spanish Program." *Hispania*. 34:292-293. August 1951.

Estrich, Robert M. and Sporber, Hans. *Three Keys to Language*. New York: Rinehart, 1952.

Etnire, Elizabeth. "Five Years of Spanish in the Elementary School." *Modern Language Journal*. 42:349-351. November 1958.

Fennessey, James. "An Exploratory Study of Non-English Speaking Homes and Academic Performance." *ERIC*. Ed. 011 613. 1966.

"Fewer Bilinguals." *The Times Educational Supplement*. 2684:1005. October 28, 1966.

Fielding, Bryon. "How New Mexico Schools are Using Federal Funds to Meet Local Needs." *N.E.A. Journal*. September 1966.

Fogelquist, Donald F. "The Bilingualism of Paraguay." *Hispania*. 33:23-27. February 1950.

Foley, J.P. and Mathews, M.A. "Mediated Generalization and the Interpretation of Verbal Behavior." *Journal of Experimental Psychology*. 33:188-200. September 1943.

Forbes, Jack D. "An American Indian University: A Proposal for Survival." *Journal of American Indian Education*. January 1966. pp. 1-8.

Frazier, Franklin E. "Ethnic Family Patterns: The Negro Family in the U.S." *American Journal of Sociology*. 53:435-438. May 1948.

Fritz, Ralph A. "The English Handicap of Junior High School Pupils from Foreign-Speaking Homes, and Remedial Suggestions." *Journal of Educational Research*. 27:412-421. February 1934.

Fuller, Lorraine. "The Effect of Kindergarten Speech Training on Primary Grade Progress and Achievement of Children with Foreign Language Handicaps. *California Journal of Elementary Education*. 4:165-173. 1936.

Garretson, O.K. "A Study of Causes of Retardation Among Mexican Children." *Journal of Educational Psychology*. 19:31-40. January 1928.

Garwood, David A. "An Experiment in Bilingual, Bicultural Education." *Liberal Education*. 48:49-53. March 1962.

Giduz, Hugo. "Teaching Modern Foreign Languages." *Modern Language Journal*. 36:65-67. February 1952.

Gilbert, Ennis Hall. *Some Legal Aspects of the Education of Spanish-Speaking Children in Texas.* Austin: University of Texas, 1947. M.S. Thesis.

Gill, L.J. and Spilka B. "Some Nonintellectual Correlates of Academic Achievement Among Mexican-American Secondary School Students." *Journal of Educational Psychology*. 53: 144-149. April 1962.

Gilliland, Minnio. "Your Children Shall Learn Paper." *N.E.A. Journal*. 45:558. December 1956.

Gillin, John. "Race Relations Without Conflict: A Guatemalan Town." *American Journal of Sociology*. 53:337-343. March 1948.

Ginsburg, Ruth R. "The Los Angeles Spanish Program." *Hispania*. 34:94-95. March 1951.

Gonzales, Rudy. "A Comparison of Indian and Non-Indian Achievement in the Parker Schools." *Annual Conference of the Co-ordinating Council for Research in Indian Education.* Phoenix: Arizona State Department of Public Instruction, 1963.

Gordon, Fortuna L. "Spanish and the Community." *Modern Language Journal*. 37:408-411. December 1953.

Gordon, Maxine W. "The Bilingual Problem of Puerto Rico." *School and Society*. 65:462-463. June 21, 1947.

Gradesnek, Anthony. "Television Can Be Effective in the FLES Program." *Hispania.* 49:485-489. September 1966.

Gray, William S. and Holmes, Eleanor. *The Development of Meaning Vocabularies in Reading*. Chicago: University of Chicago Press, 1938.

Green, Jerald R. "Language Laboratory Research: A Critique." *Modern Langauge Journal*. 49:367-369. 1965.

Greenholz, Sarah. "What's New in Teaching Slow Learners in Jr. High?" *Math Teacher*. December 1964. 1965.

Grinder, R.E., Aiko, Otomo, and Winifred, Toyota. "Comparisons Between Second, Third, and Fourth Grade Children in the Audio-Lingual Learning of Japanese as a Second Language." *Journal of Educational Research*. 56:191-197. 1965.

Guerra, Emelio L. "The Problem of Articulation Between the Junior and the Senior High Schools." *Hispania*. 48:506-511. September 1965.

Guerra, Emelio L., Abramson, David A. and Newmark, Maxim. "The New York City Foreign Language Oral Ability Rating Scale." *Modern Language Journal.* 48:486-489. December 1964.

Guerra, Manuel H. "FLES: Reality or Fiction." *Hispania.* 46:618-624. September 1963.

Guerra, Manuel H. "The Foreign Language Children's Theatre: Methods and Techniques." *Hispania*. 40:490=493. December 1957.

Hahn, E.F. and Elise S. *Stuttering: Significant Theories and Therapies*. Second Edition. Stanford: Stanford University Press, 1956.

Hanlon, Dorothy. "The Use of a Language Lab with Navajo Students." *Annual Conference of the Co-ordinating Council of Research in Indian Education*. Phoenix: Arizona State Department of Public Instruction, 1963.

Harding, Maude B. "Grading Our Foreign Students." *Junior College Journal*. 25. January 1955.

Harkins, Arthur M. "Public Education on a Minnesota Chippewa Reservation." *ERIC.* Ed 010 638. 1967.

Harper, Ashby T. "Experiment in International Education." Hispania. 33:63-65. February 1950.

Harrison, Selig G. India: The Dangerous Decades. Princeton: University Press, 1960.

Haubrich, Vernon. "Cross Cultural Approaches to Behavior and Learning." ERIC. Ed. 010 781. 1966.

Haugen, Einar. "The Analysis of Linguistic Borrowing." Language. 26:210-231. 1950.

Haugen, Einar. The Norwegian Language in America: A Study in Bilingualism-The Bilingual Community. Philadelphia: University of Pennsylvania Press, 1953. Volumes 1-2.

Haugen, Einar. "The Phoneme in Bilingual Description." Language Learning. 7:17-23; No. 3. 1956-57.

Haugen, Einar. "Some Pleasures and Problems of Bilingual Research." International Journal of American Linguistics. 20:116-122. April 1954.

Haugen, Einar. "Uriel Weinreich's Languages in Contact." Language. 30:380-388. 1954.

Haught, B. T. "The Language Difficulty of Spanish American Children." Journal of Applied Psychology. 15:92-95. 1931.

Hawley, Florence. Some Factors in the Indian Problem in New Mexico. Division of Research, Department of Government, University of New Mexico. 1948.

Hayakawa, S. I. Language in Action. New York: Harcourt, Brace and World, 1941.

Hill, H. A. "Correlation Between I.Q. of Bilinguals at Different Ages on Different Intelligence Tests." School and Society. 44:89-90. July 18, 1936.

Hill, H. A. "Resemblence of Bilingual Siblings in Verbal Intelligence." School and Society. 43:271-272. February 22, 1936.

Hobart, Charles W. "Some Consequences of Residential Schooling." Journal of American Indian Education. Tempe: Arizona State University, January 1968.

Hobart, Charles W. "Underachievement Among Minority Group Students." Phylon. 24:184-196. 1963.

Hockett, Charles F. "Age Grading and Linguistic Continuity." Language. 26:449-457. 1950.

Hocking, Elton. "Casting Out Devils." N.E.A. Journal. 54:12. January 1965.

Hocking, Elton. "Foreign Languages in Elementary School." N.E.A. Journal. 49:33. February 1960.

Hocking, Elton. "Gift of Tongues." N.E.A. Journal. 39:260. April 1958.

Hocking, Elton. "The Sound of Pictures." Modern Language Journal. 52:141-145. March 1968.

Hodgkinson, Harold L. Education in Social and Cultural Perspectives. Englewood Cliffs, N.J. Prentice Hall, 1962.

Hoffman, Moses N.H. Measurement of Bilingual Background. New York: Columbia University, 1934.

Hoijer, Harry. ed. Language in Culture. Conference on Interrelations of Language and Other Aspects of Culture. Chicago: University of Chicago Press, 1954.

Huebener, Theodore. Audio-Visual Techniques in Teaching Foreign Languages. New York: New York University Press, 1967.

Huebener, Theodore. English for Spanish-Americans. New York: Holt Publishing Co., 1950.

Huebener, Theodore. "Fifty Years of Foreign Languages in New York City." Hispania. 47:781-788. December 1964.

Humphrey, N. "On Assimilation and Acculturation." Psychiatry. 6:343-345. November 1943.

Hutton, Eddie Ruth. "A Spanish-Social Studies Course for Spanish-Speaking Students in the Southwest." Modern Language Journal. 26:183. March 1942.

Iannucci, James E. "Meaning Discrimination in Bilingual Dictionaries: A New Lexicographical Technique." Modern Language Journal. 41: 272-281. October 1957.

Ilbek, Jacques. "A Case of Semantic Interference." French Review. 41:338-376. December 1967.

"The Intermediate Teacher's Role With Indian Children." ERIC. Ed. 011 220. 1966.

"Invisible Minority: Attitude of Schools Toward Spanish-Speaking Pupils." Newsweek. 68:46. August 1966.

Jacobs, John F., and Pierce, Marnell L. "Bilingualism and Creativity." Elementary English. 43:499-503. May 1966.

Jakobovits, Leon. "Implications of Recent Psycholinguistic Developments for Teaching a Second Language. Language Learning. 18:89-93; Nos. 1-2. 1968.

Jeffrey, Ruby. "The Performance of Indians on the GATB." Annual Conference of the Co-ordinating Council for Research in Indian Education. 1962.

Jensen, J.V. "Effects of Childhood Bilingualism." Elementary English. 39:359-356. April 1962.

Johansen, Sigurd. Rural Social Organization in a Spanish-American Culture Area. Albuquerque, University of New Mexico Press, 1948.

Johnson, B.E. Ability, Achievement and Bilingualism: A Comparative Study Involving Spanish-Speaking and English-Speaking Children at the Sixth Grade Level.University of Maryland: 1962.

Johnson, L.W. "Comparison of the Vocabularies of Anglo American and Spanish American High School Pupils." Journal of Educational Psychology. 29:135-144. February 1938.

Johnson, Wendell. People in Quandaries. New York: Harper and Brothers, 1946.

Johnston, Andrew Vance. An Investigation of Elementary School Teachers: Information, Concepts, and Generalizations About Races, Cultures, and Nations. Eugene, Oregon: University of Oregon Press, 1963.

Johnston, Marjorie. "Report of Conference on the Role of Foreign Languages in American Schools." Hispania. 36:207-214. May 1953.

Jones, R.A., Kaplan, R. and Michael, W.B. "The Predictive Validity of a Modified Battery of Tests in Language Skills for Foreign Students at an American University." Educational and Psychological Measurement. 24:961-962.; No.4. 1964.

Jones, Robert C. "Ethnic Family Patterns: The Mexican Family in the United States." American Journal of Sociology. 53: 450-452. May 1948.

Jones, W.R. "Attitudes Toward Welsh as a Second Language: A Preliminary Investigation." British Journal of Educational Psychology. 19:44-52. February 1949.

Kelly, Victor H. "Reading Abilities of Spanish and English Speaking Pupils." Journal of Educational Research. 29:209-211. November 1935.

Keyser, Margaret Lee. "Research in Reading in Elementary School." *Review of Educational Research*. 22:65-73. April 1952.

Kiser, Margaret. "What the Pan American Union is Doing to Foster the Study of the Spanish Language and of Spanish-American Literature and Culture." *Hispania*. 30:50-56. March 1947.

Knowlton, Clark. "Changes in the Structure and Roles of Spanish-American Families of Northern New Mexico." *Proceedings of the Southwestern Sociological Association*. Dallas: Texas Woman's University. April 1965.

Knowlton, Clark S. "Spanish American Schools in the 1960's." *ERIC*. Ed. 012 194. 1966.

Kwapil, Helen M. "Foreign Language in the Junior High School. *N.E.A. Journal*. 51:47. November 1962.

Lado, Robert. *Linguistics Across Cultures*. Applied Linguistics for Language Teachers. Ann Arbor: University of Michigan, 1957.

Laird, Charlton. *The Miracle of Language*. New York: World Publications, 1953.

Landar, H.T. and Ervin, Susan M. "Navajo Color Categories." *Language*. 36:368-382. 1960.

Larew, Leonor A. "Games for FLES." *Hispania*. 49:834-835. December 1966.

Lee, Irving J. *Language Habits in Human Affairs*. New York: Harper, 1941.

Leino, Walter. *Teaching of Spanish in Elementary School and the Effect on Achievement in Other Selected Areas*. U.S. Office of Education, Contract SAE 9515. St. Paul Public Schools, November 1963.

Leopold, W.F. "A Child's Learning of Numerals." *Quarterly Journal of Speech*. 35:202-209. April 1949.

Leopold, W.F. "The Study of a Child Language and Infant Bilingualism." *Word*. 4:1-17;No. 1. 1948.

Lesser, G. et. al. *Mental Abilities of Children in Different Cultural and Social Groups*. Cooperative Research Project #1635. Harvard University.

Levinson, Boris. "A Comparison of Performance: Bilingual and Monolingual Native Born Jewish Preschool Children on Four Intelligence Tests." *Journal of Clinical Psychology*. 15:74-77; No. 1. 1959.

Levy, John. "Conflicts of Cultures and Children's Maladjustment." *Mental Hygiene*. 17:41-50. January 1933.

Lewald, H. Ernest. "A Tentative Outline of Problems in the Knowledge, Understanding, and Teaching of Culture Pertaining to the Target Language." *Modern Language Journal*. 52:301-309. May 1968.

Lewis, D. "Bilingual and Non-Verbal Intelligence: A Further Study of Test Results." *British Journal of Educational Psychology*. 29:17-22. 1959.

Lewis, D.G. "Reply to 'A Critical Study of Bilingualism and Non-Verbal Intelligence'". *British Journal of Educational Psychology*. 30:78. 1960.

Lewis, George. "A Comparison of Indian and Non-Indian Achievement in the Holbrook Schools." *Annual Conference of the Co-ordinating Council for Research in Indian Education*. Phoenix: Arizona State Department of Public Instruction, 1963.

Lewis H. and E. "Written Language Performance of Sixth Grade Children of Low Socioeconomic Status from Bilingual and Monolingual Backgrounds." *Journal of Experimental Education*. 33. Spring 1965.

Lewis, Oscar. *The Children of Sanchez*. New York: Random House, 1961.

Lewis, Oscar. *Five Families: Case Studies in Culture of Poverty.* New York: Basic Books, 1949.

Lipton, Gladys C. "New Trends in FLES: A Quiet Optimism." *Hispania*. 50:122-124. March 1967.

Lloyd, L. "Comparison of Standardized Test Results of Indian and Non-Indian in Integrated School Systems." *Journal of American Indian Education*. Tempe: Arizona State University, June 1961.

Longmore, T.W. and Hitt, H.L. "A Demographic Analysis of First and Second Generation Mexican Population of the U.S." *Southwestern Social Science Quarterly*. 24:38-149. 1943.

Lopez, Carlos. "The Union School District Language Project." *Hispania*. 47:808-809. December 1964.

"In Lord Raglan's Wake." *London Times Educational Supplement*. January 9, 1959. p. 37.

Lorge, Sarah. "Comments on 'Language Laboratory Research: A Critique'." *Modern Language Journal*. 49. 1965.

Louttit, C.M. "The Use of Foreign Languages by Psychologists." *American Journal of Psychology*. 68:484-486. September 1955.

Louttit, C.M. "The Use of Foreign Languages by Psychologists, Chemists, and Physicists." American Journal of Psychology. 70:314-316. June 1957.

Love, Harold D. "Auditory Discrimination, Spelling and Reading with Bilingual and Monolingual Children." Journal of Developmental Reading. 6:12-14; No. 1. Autumn 1963.

Lunis, Leif. "Bilingual Children." Childhood Education. 39:331-332. March 1963.

Lynn, Klonda. "Bilingualism in the Southwest." Quarterly Journal of Speech. 31:175-180. April 1945.

Mackey, W. "Bilingualism." Encyclopedia Britannica. 4. 1960. 14th edition.

MacRae, Margit W. "Conversational Spanish in the San Diego City Schools." Hispania. 37:75-77. March 1954.

MacRae, Margit W. "Singing and Learning Spanish." N.E.A. Journal. 40:30. February 1961.

Mahikian, Charles. "Measuring the Intelligence and Reading Capacity of Spanish-Speaking Children." Elementary School Journal. 39:760-768. December 1939.

Malherbe, E.G. "Home Language as a Medium of Instruction and 'The Effect of the 'Wrong' Medium on Educational Progress'." The Bilingual School. London: Longmans, Green and Co., 1946. pp. 51-59.

Malherbe, E.G. "The Meaning of 'Home Language'." The Bilingual School. London: Longmans, Green and Co., 1946. pp. 44-50.

Malherbe, E.G. "School Achievement in Unilingual and Bilingual Schools." The Bilingual School. London: Longmans, Green and Co., 1946. pp. 60-74.

Mallo, Jerónimo. "El Anglisimo en Los Libros de Texto para la Enseñanza de la Lengua Espanola." Modern Language Journal. 33:295-301. April 1949.

Mallo, Jerónimo. "Utilidad de la Casa Hispanica en el Aprendizaje de la Lengua Espanol." Modern Language Journal. 35:310-313. April 1951.

Manuel, H.T. and Wright, C.E. "The Language Difficulty of Mexican Children." Journal of Genetic Psychology. 36:458-466. 1929.

Manuel, H.T. "Physical Measurements of Mexican Children in American Schools." Child Development. 5:237-253. September 1934.

Manuel, H.T. "The Use of Parallel Tests in Foreign Language Teaching." Educational and Psychological Measurement. 13:431-436; No. 3. Autumn 1953.

Marshall, M.V. and Phillips, R.H. "Effects of Bilingualism on College Grades." Journal of Educational Research. 36:131-132. October 1942.

Masella, Aristide. "Help for the Newly Arrived Spanish-Speaking Students." High Points. 48:64-67. December 1966.

Massman, Robert E. "Spanish in New Britain." Hispania. 36:453-456. November 1953.

Mattson, Robert H. and Sage, Daniel D. "Reinforcing Effects on Differential Contingencies on Verbal Learning in Educable Mentally Retarded Children." ERIC. 1967. p. 634.

Maza, Herbert. "Language Differences and Political Integration." Modern Language Journal. 41:365-372. December 1957.

McCarthy, Dorothea A. "Language Disorders and Parent-Child Relationships." Journal of Speech and Hearing Disorders. 19:514-523. December 1954.

McCary, J.L. "Ethnic and Cultural Reactions to Frustration." Journal of Personality. 18:321-326. March 1950.

McClendon, Juliette and Ainsworth, C.L. "Spanish for Spanish Speakers." Texas Outlook. 49:24-26. 1965.

McCombe, Leonard. et. al. Navaho Means People. Cambridge: Harvard University Press, 1951.

McCormack, William. "American Juniors in Japan." Liberal Education. 53: May 1967.

McGrath, Earl J. "Foreign Languages and World Affairs." N.E.A. Journal. 41:409. October 1952.

McLeod, Doris G. and First, Ramona K. "Summary: Typewriting Instruction as an Aid to the Learning of English as a Foreign Language." ERIC. 1967. p. 649.

Mead, Donald F. The Relationship Between Bilingualism and Verbal Test Performance. Albuquerque: University of New Mexico Press, 1957. M.A. Thesis.

Mead, Margaret. "Group Intelligence Tests and Linguistic Disability Among Italian Children." School and Society. 25:465-468. April 16, 1927.

Megersteen, R.S. "Bilingual Dictionaries and Applied Linguistics." *Modern Language Journal*. 44:163-167. April 1960.

Meldenberger, Kenneth W. "The Current Status of Teaching of Spanish in the Elementary Schools." *Hispania*. 37:63-65. March 1954.

Metraux, Ruth W. "A Study of Bilingualism Among Children of U.S. French Parents." *French Review*. 38:650-665. April 1965.

Meyer, Samuel L. and Cullen,Arthur. "Spanish-Speaking College in North America." *Liberal Education*. 49:218-225. May 1963.

"The Miami Bilingual Program." *ERIC.* 1967. p. 159.

Milisen, R. and Villarreal, J. et. al. "Report of Subcommittee on Articulation Problems." *Journal of Speech and Hearing Disorders, Monograph Supplement*. 5:14-17. September 1959.

Miller, Virginia and Payne, Doris. "Pronunciation of American English for Hungarian Students." *Speech Teacher*. 7:251-252. September 1958.

Miller, Willie. "The Latin-American Child and Music." *Texas Outlook*. 31:26-27. October 1947.

Milor, John. "Problems of a Junior High for Mexicans." *California Journal of Secondary Education*. 16:482-484. December 1941.

Mireles, E.E. "Corpus Christi Kids are Bilingual." *Texas Outlook*. 35:10-12. May 1951.

Mitchell, A.J. "The Effect of Bilingualism in the Measurement of Intelligence." *Elementary School Journal*. 38:29-37. September 1937.

"Mobilization for Youth, Inc.,News Bulletin, Summer 1965." *ERIC*. 1967. p. 96.

Modiano, Nancy. "Cultural and Sociological Factors Relating to Learning Development." *ERIC*. Ed. 010 924. 1966.

Morris, Charles. *Varieties of Human Value*. Chicago: University of Chicago, 1956.

Moss, Margery Anne. "The Effect of Speech Defects on Second Grade Reading Achievement." *Quarterly Journal of Speech.* 24:642-654. December 1938.

Mulhauser, Ruth. "Flexselsior." *Modern Language Journal*. 43:19-20. January 1959.

Muller, Daniel H. "California's Compulsory FL Law -- Threat or Promise?" *Hispania*. 48:331-334. May 1965.

"Nat the Rat." ERIC. 1967. p. 162.

"Native and Ancestral Speech." Times Educational Supplement. 2208:1199. September 13, 1957.

Naunheim, Elizabeth. "Spanish in Corpus Christi." Hispania. 37:77-78. March 1954.

Neal, Elma A. "Adapting the Curriculum to Non-English Speaking Children." Elementary English Review. 6:183-185. September 1929.

Nelson, Lowery. "Speaking of Tongues." American Journal of Sociology. 54:202-210. November 1948.

Newman, Thomas B. and Seiser, William. "Help for the Mathematically Disadvantaged." Math Teacher. November 1967.

Nice, Margaret M. "The Speech Development of a Child from Eighteen Months to Six Years." Pedagogical Seminary. 24:204-243. June 1917.

O'Cherony, Rosalyn. "FLES Status and Teacher Preparation." Hispania. 48:121-125. May 1965.

Officer, James. "An Over-view of Current Needs in Indian Education." Annual Conference of the Co-ordinating Council for Research in Indian Education. Phoenix: Arizona State Department of Public Instruction. 1963. pp. 1-8.

Parmee, Edward. "Social Factors Affecting the Education of the San Carlos Apaches." Annual Conference of the Co-ordinating Council for Research in Indian Education. Phoenix: Arizona State Department of Public Instruction, 1961. pp. 22-26.

Pasamanick, Benjamin. "The Intelligence of American Children of Mexican Parentage: A Discussion of Uncontrolled Variables." Journal of Abnormal and Social Psychology. 46:598-602. July 1951.

Paschal, Franklin C. and Sullivan, Louis R. "Racial Differences in the Mental and Physical Development of Mexican Children." Comparative Psychology Monograph. 3:1-76. October 1925.

Payne, Ruby. "Learning to Say 'Good Morning' as Well as 'Buenos Dias'." National Education Journal. 41:165. March 1952.

Peal, E. and Lambert, W. "Relation of Bilingualism to Intelligence." Psychological Monograph. No. 77. 1963.

Phillips, L.H. "Segregation in Education: A California Case Study." Phylon. 10:407-413. 1949.

Pintner, Rudolph. "The Influence of Language Background on Intelligence Tests." _Journal of Social Psychology_. 3:235-240. 1932.

Pintner, Rudolph and Arsenian, Seth. "The Relationship of Bilingualism and Verbal Intelligence and School Adjustment." _Journal of Educational Research_. 31;255-263. December 1937.

Pintner, Rudolph and Keller, R. "Intelligence Tests of Foreign Children." _Journal of Educational Psychology_. 13:214-222. April 1922.

Piroch, Goldie. "The Importance of Bilingual Description to Foreign Language Learning." _Language Learning_. 6:51-61; No. 1. 1955.

Politzer, Robert. "Experimentation in the Presentation of Parallel and Contrasting Structures. _Language Learning_. 18:35-41; Nos. 1-2. 1968,

Poncel, Joseph. "The History, Present Status and Future Needs in Indian Education." _Annual Conference of the Co-ordinating Council for Research in Indian Education_. Phoenix: Arizona State Department of Public Instruction, 1963. pp. 86-87.

Potter, Simeon. _Language in the Modern World_. Baltimore: Pelican, 1960.

Powers, Francis F. "Psychology of Language Learning." _Psychological Bulletin_. 26:261-274. May 1929.

Pratt, Wayne. "Indian Education Research-Curiosity Arousers." _Annual Conference of the Co-ordinating Council for Research in Indian Education_. Phoenix: Arizona State Department of Public Instruction, 1962. pp. 84-85.

"Problems and Prospects of the Rural Spanish American Village of Northern New Mexico." _ERIC_. Ed. 012 671. 1963.

"Publishings in Welsh." _Times Educational Supplement_. 2248:1033. June 20, 1958.

Pusey, Harriet C. "Arithmetic Achievement of Japanese-Americans." _Mathematics Teacher_. April 1945. p. 172.

Quinlan, Nora. "Teaching Spanish in the Grades in the Hastings-on-Hudson School." _Hispania_. 36:456-457. November 1963.

Raubicheck, Letitia. "Psychology of Bilingualism." _Volta Review_. 36:17-20. January 1934.

Rebolledo, Antonia. "Shall Language Groups Be Segregated for Teaching Spanish?" _New Mexico School Review_. 22:3-6. December 1942.

Reichard, Gladys. Navajo Grammar. New York: J.J. Augustin, 1957.

Reinecke, J.E. and Tokimasa, Aiko. "The English Dialect of Hawaii." American Speech. 9:122-131. April 1934.

Rigg, Melvin. "Some Further Data on the Language Handicap." Journal of Educational Psychology. 19:252-256. April 1928.

Roach, Stephen F. "What the Federal Courts Say About Racial Imbalance in Northern School Systems. Bulletin of the National Association of Secondary School Principals. December 1965. pp. 41-55.

Rodriquez, A. Jr. " Are Bilingual Children Able to Think in Either Language with Equal Facility and Accuracy?" Elementary School Principal. No. 10. 1931.

Roessel, Robert A. "Results of Current Research in Indian Education Performed by Arizona State University." Annual Conference of the Co-ordinating Council for Research in Indian Education. Phoenix: Arizona State Department of Public Instruction. 1963.

Rohrer, John H. "The Test Intelligence of Osage Indians." Journal of Social Psychology. 16:99-107. August 1942.

Rounds, Rita S. "Spanish for the 'Exceptional Child'." Hispania. 36:338-340. August 1953.

Rowan, Robert; Kendall, Ellis and Stroud, Mary. "The Teaching of Bilingual Children." Education. 70:423-426. March 1950.

Ryan, W.C. Jr. "The Dublin Meeting of the World Federation of Education Associations." School and Society. 38:353-359. September 16, 1933.

Sanchez, George I. The Education of Bilinguals in a State School System. Albuquerque: University of New Mexico Press, 1931.

Sapon, Stanley M. " An Application of Psychological Theory to Pronunciation Problems in Second Language Learning." Modern Language Journal. 36:111-114. March 1952.

Schneider, A.A. An Investigation of Bilingualism and Achievement in Reading in the Fourth Grade of the Parochial School System in the Archdiocese of Santa Fe, 1957-58. Albuquerque: University of New Mexico Press, 1961.

"School-Community Co-ordinating Team: Some Unique Features." ERIC. 1966. p. 6.

Senour, A.C. "Necessity for Use of a Non-Language Mental Test in Group Intelligence Testing." Journal of Educational Research. 27:435-441. February 1934.

Sheldon, William. "The Intelligence of Mexican Culture." School and Society. 19:139-142. 1924.

Singer, Harry. "Bilingualism and Elementary Education." Modern Language Journal. 40:444-458. November 1956.

Singleton, Marilyn. "An Approach to Solving Word Problems." Math Teacher. March 1958. p. 212.

Singleton, Robert and Bullick, Paul. "Some Problems in Minority Group Education in the Los Angeles Public Schools." Journal of Negro Education. 32:137-145; No. 2. Spring 1963.

Sizemore, Mamie et. al. "Colorado Indian Education Workshop Papers." ERIC. Ed. 012 193. 1964.

Smith, Madorah. "The Effect of Bilingual Background on College Aptitude Scores and Grade Point Ratios Earned by Students at the University of Hawaii." Journal of Educational Psychology. 33:356-364. April 1942.

Smith, Madorah. "Progress in the Use of English After 22 Years by Children of Chinese Ancestry in Honolulu." Journal of Genetic Psychology. 90:255-258. June 1957.

Smith, Madorah. "A Study of Some Factors Influencing the Development of the Sentence in Preschool Children." Journal of Genetic Psychology. 46:182-212. March 1935.

Smith, Madorah. "A Study of the Speech of Eight Bilingual Children of the Same Family." Child Development. 6:19-25. March 1935.

Smith, Mary. "Listening Habits and Speech Sound Discrimination Developed Through a Multiple Sensory Approach." ERIC. 1966. p. 162.

Smith, Merrils. "The Use of Teaching Machines with Pre-first Grade Indian Students." Annual Conference of the Co-ordinating Council for Research in Indian Education. Phoenix: Arizona State Department of Public Instruction, 1963.

Smith, R. Lorne. "Some Considerations That Seem to Weigh Against the Use of Tape Recordings in the Language Laboratory." Modern Language Journal. 44:75-76. February 1960.

Spoerl, Dorothy Tilden. " Bilinguality and Emotional Adjustment." Journal of Abnormal and Social Psychology. 38:37-57. 1943.

Spolsky, Bernard. "Computer Based Instruction and Criteria for Pedagogical Grammar." Language Learning. 15:137-143; Nos. 3-4. 1965.

Stafford, Kenneth R. *Problem-Solving as a Function of Language.* Tempe: Arizona State University Press, 1966.

Stark, Matthew. "Project Awareness: Minnesota Encourages the Chippewa Indians." *Journal of American Indian Education.* May 1967. pp. 6-13.

Stout, Irving W. "A Philosophical Analysis of the Place of Research in Indian Education." *Annual Conference of the Co-ordinating Council for Research in Indian Education.* Phoenix: Arizona State Department of Public Instruction, 1963. pp. 30-33.

Stowell, Ernest. "The Limitations of Psycholinguistics." *Modern Language Journal.* 43:171-174. April 1959.

Strang, Ruth. *Introduction to Child-Study.* New York: MacMillan Co., 1951.

Stroud, J.B. "Predictive Value of Obtained I.Q.'s of Groups Favored and Unfavored in Socioeconomic Status." *Elementary School Journal.* 43:97-104. October 1942.

"Subjects in Small High Schools." *N.E.A. Research Bulletin.* May 1962.

"Successful Teacher Practices in the Teaching of Indian Youngsters." *Co-ordinating Council for Research in Indian Education.* 1963. pp. 1-50.

Swadesh, Morris. "Observations of Pattern Impact on the Phonetics of Bilinguals." Leslie Spier, et. al. ed. *Language, Culture and Personality.* Menasha, Wisconsin: Sapir Memorial Publication Fund, 1941.

Swickard, D.L. and Spilka, B. "Hostility Expression Among Delinquents of Minority and Majority Groups." *Journal of Consulting Psychology.* 25:216-220. 1961.

Symonds, Percival. "The Effect of Attendance at Chinese Langu Schools on Ability with the English Language." *Journal o Applied Psychology.* 8:411-423. 1924.

"Teaching Bilingual Children." *ERIC.* 1967. p. 160.

Thompson, Hildegard. "Education Among American Indians: Institutional Aspects." *The Annals -- American Academy of Political and Social Science.* 311:95-104. May 1957.

Thompson, Laura and Joseph, Alice. *The Hopi Way.* Lawrence, Kansas: University of Kansas Press, 1944.

Thompson, Laura and Joseph, Alice. "White Pressures on Indian Personality and Culture." *American Journal of Sociology.* 53:17-22. July 1947.

Tireman, L.S. "The Bilingual Child and His Reading Vocabulary." Elementary English. 32:33-35. January 1955.

Tireman, L.S. "School Problems Created by the Foreign Speaking Child." Texas Outlook. 26:19-20. November 1942.

Tock, Hans, H. and Rabin, Albert. "Factors Entering into Ethnic Identification: An Experimental Study." Sociometry. 25:297-312. 1962.

Trager, Helen G. and Yarrow, Marian Radke. They Learn What They Live. New York: Harper, 1952.

Underhill, Ruth M. Hawk Over Whirlpools. New York: J.J. Augustine, 1940.

Upshur, J. "Cross Culture Testing." Language Learning. 16:183-188. 1966.

Uriquides, Maria L. "Tucson's Tale of Two Cultures." N.E.A. Journal. 56:62-64. February 1967.

VanEenenaam, Evelyn. "Annotated Bibliography of Modern Language Methodology for 1950." Modern Language Journal. 36:39-56. January 1952.

VanEenenaam, Evelyn. "Annotated Bibliography of Modern Language Methodology for 1958." Modern Language Journal. 44:24-42. January 1960.

Vetter, Carol. "Trouble Spot for Bilingual Students." Texas Outlook. 52:31. January 1968.

Vickery, William E. and Cole Stewart G. Intercultural Education in American Schools. New York: Harper Bros., 1943.

Wagner, Susan. "Bilingualism: Another Step Toward European Unification." Institute of International Education News Bulletin. 29:18-22. February 1954.

Wallace, Almina. "Bilingualism and Retardation." Elementary English. 33:303-304. May 1956.

Watta, Janet. "Gitten Calls for Bilingualism at Primary Level." Times Educational Supplement. 2749:270. January 26, 1968.

Weinreich, Uriel. Languages in Contact. New York: Publications of the Linguistic Circle of New York; 1953.

Wessel, Bessie B. "Ethnic Family Patterns: The American Jewish Family." American Journal of Sociology. 53:439-432. May 1948.

White, Emilie Margaret. "As the Twig is Bent." Modern Language Journal. 36:320-324. November 1952.

Whorf, Benjamin. Language, Thought and Reality. New York: John Wiley and Sons, 1956.

Wiens, Gerhard. "Russo-German Bilingualism: A Case Study." Modern Language Journal. 36:392-395. December 1952.

Willibrand, W.A. "When German was King: A FLES Program Around 1900." German Quarterly. 30:354-261. November 1957.

Wonder, John P. "Bilingual Mexican-American as a Potential Teacher of Spanish." Hispania. 48:97-99. March 1965.

Woods, Frances Jerome. Cultural Values of American Ethnic Groups. New York: Harper and Brothers, 1956.

Yoshioka, Joseph G. "A Study of Bilingualism." Journal of Genetic Psychology. 36:473-479. 1929.

Zeydel, Edwin H. "The Teaching of German in the United States from Colonial Times to the Present." German Quarterly. September 1964. pp. 315-392.

Ziegler, Rosarro B. "On Starting a FLES Program." Hispania. 46:144-145. March 1963.

Zintz, Miles V. "Indian Children are Different." New Mexico School Review. October 1960. pp. 26-27.

Zucker, Loise. "Psychological Aspects of Speech-Melody." Journal of Social Psychology. 23:73-128. 1946.

PROJECTS AND ON-GOING PROGRAMS

PROJECTS, PROPOSALS, AND RESEARCH PROGRAMS

Following are the addresses of projects from which information or literature was received. Although it is not exhaustive, this bibliography provides a cross-sectional bank from which current data on bilingual programs may be obtained.

ARIZONA

A Bilingual Pilot Study, (A comparison of the development of bilingually taught first graders), Phoenix, Arizona.

Project Director
Wilson School District 7
2411 E. Buckeye Road
Phoenix, Arizona 85034

An Experienced Teacher Fellowship Program for Primary Teachers of Bilingual-Bicultural Children in Southern Arizona. Tucson, Arizona.

Dr. Pat N. Nash, Director
College of Education
University of Arizona
Tucson, Arizona

(Mexican-Americans teach their teachers Spanish.) Tucson, Arizona.

Mrs. Kenneth Hayden
P. O. Box 5501
Tucson, Arizona 85703

Rock Point Boarding School Pilot Project--Preschool Navajos Learn Bilingually. Window Rock, Arizona.

Assistant Area Director (Education)
Bureau of Indian Affairs
Navajo Area Office
Window Rock, Arizona 86515

Teaching of English via Television. Tucson, Arizona.

Dr. Guido Capponi
Coordinator of Southwestern Cooperative
Educational Laboratory
University of Arizona Program
Tucson, Arizona

CALIFORNIA

English as a Second Language. Sacramento, California.

Project Director
Sacramento City Unified School District
Administration Building
1616 N Street
P. O. Box 2271
Sacramento, California 95810

ESL Demonstration Project Center. San Diego, California.

Project Director
2950 National Avenue
San Diego, California 92113

Operation STEP-UP (Stimulation Through Environmental Programing Unstructured Play). Spreckels, California.

Superintendent
P. O. Box 308
Spreckels, California 93962

Project CLINIC (Clinical Laboratory Innovations Necessary to Increase Children's Learning. Sunnyvale, California.

Superintendent of Schools
Sunnyvale School District
656 East Maude Avenue
Sunnyvale, California 94088

Project Communication Gap. St. Helena, California.

Superintendent
St. Helena Unified School District
1325 Adams Street
St. Helena, California

Project Libro. (A bilingual materials center). Beverly Hills, California.

Executive Director
The Galton Institute
319 South Robertson Boulevard
Beverly Hills, California 90211

Project MOVE (More Opportunities Via Education). Los Angeles, California.

Superintendent
Willowbrook School District
1623 East 118th Street
Los Angeles, California 90059

A Spanish Speaking College in North America--Elbert Covell College. Stockton, California.

Provost
Elbert Covell College
University of the Pacific
Stockton, California 95204

Supplementary Education for Indians in Rural and Reservation Areas.

Inyo County Superintendent of Schools
California State Department of Education
Independence, California

A United Neighborhood Involved in Developing an Outstanding School. San Jose, California.

Director of Compensatory Education
Alum Rock Union Elementary School District
2930 Gay Avenue
San Jose, California 95127

COLORADO

Improving Attitudes, Cultural Understanding and the Opportunity for Achievement. Denver, Colorado.

Superintendent
Denver City Schools
414 14th Street
Denver, Colorado 80202

Interest Profile Analysis Curriculum. Security, Colorado.

Administrative Assistant to the Superintendent
701 Widefield Drive
Security, Colorado 80011

A Multi-Media Approach to Library Services for the Spanish Surname. Greeley, Colorado.

Dr. D. Harold Bowman, Director
Colorado State College
Greeley, Colorado

DELAWARE

A Project in Bilingual Education. (High school students learn a regular curriculum in a foreign language). Dover, Delaware.

Mr. Hernan Navarro
Fulbright Specialist
State Department of Public Instruction
Dover, Delaware 19901

FLORIDA

FM Radio - An Oral Communication Project for Migrants. West Palm Beach, Florida.

Superintendent of Public Instruction
301 North Olive Avenue
West Palm Beach, Florida 33401

MICHIGAN

Bilingual Curriculum Development - Supportive Material in Teaching Spanish as a Second Dialect and Teaching Spanish to Native English Speakers in Bilinguals Classrooms. Ann Arbor, Michigan.

Director
City Center Building - Suite 550
22 E. Huron
Ann Arbor, Michigan 48108

NEW JERSEY

North Hudson Language Development Center. Union City, New Jersey.

Superintendent of Schools
3400 Palisade Avenue,
Union City, New Jersey

NEW MEXICO

Cooperative Program in Special Education. Las Vegas, New Mexico

Superintendent
1620 South Gonzales Street
Las Vegas,New Mexico 87701

English as a Second Language for Navajos, An Overview of Certain Cultural and Linguistic Factors. Albuquerque, New Mexico.

Area Tribal Operations Officer
Bureau of Indian Affairs
Albuquerque Area Office
P. O. Box 8327
Albuquerque, New Mexico 87108

High Intensity Language Training, Teacher Corps. New Mexico and California.

Miss Patricia Cabrero
University of Southern California
Los Angeles, California 90012

The Isleta Project - Computer-mediated Instruction. Albuquerque, New Mexico.

Dr. James Evans
EVCO
235 San Pedro Drive NE
Albuquerque, New Mexico 87108

Project Move Ahead -- Basic Education via Radio. Mesilla Valley, New Mexico.

Director
Research and Program Development
Las Cruces Public Schools
301 West Amador Avenue
Las Cruces, New Mexico 88001

Reducing Barriers to Communication in Two New Mexico School Districts. Los Lunas and Estancia, New Mexico.

Co-Director
Educational Service Center
3205 Central Avenue NE
Albuquerque, New Mexico 87106

A Sustained Primary Program for Bilingual Students. Las Cruces, New Mexico.

Director
Research and Program Development
301 West Amador Avenue
Las Cruces, New Mexico 88001

NEW YORK

Early Childhood Bilingual Education Project. New York, New York.

Ferkauf Graduate School of Humanities and
Social Services
Yeshiva University
55 Fifth Avenue
New York, New York 10003

New York City School-Community Interaction Umbrella. New York, New York.

Superintendent of Schools
110 Livingston Street
Brooklyn, New York 11201

OKLAHOMA

Cherokee Cross Cultural Project. Tahlequah, Oklahoma.

Director
Cherokee Cross Cultural Project
Tahlequah, Oklahoma 74464

OREGON

District Programs for Migrant Children. Salem, Oregon.

Department of Education
Division of Instruction
General Consultant Service Building
Salem, Oregon 97310

The Russian Program. Woodburn, Oregon.

Assistant Superintendent
Woodburn School District
Lincoln School
Woodburn, Oregon 97071

PENNSYLVANIA

Bilingual Reading List. King of Prussia, Pennsylvania.

Project Associate
Research and Information Services
443 South Gulph Road
King of Prussia, Pennsylvania 19406

TEXAS

A Bilingual Program for the Migrant. Austin, Texas.

Director
Texas Migrant Educational Development Center
Southwest Educational Development Laboratory
Suite 550, Commodore Perry Hotel
Austin, Texas 78701

A Bilingual Program for First and Second Graders. Bandera, Texas.

Project Director
Bandera Independent School District
Bandera, Texas 78003

Conference on Development of Bilingualism in Children of Varying Linguistic and Cultural Heritages. Austin, Texas.

Regional Educational Agencies Project in International Education
Texas Education Agency
Austin, Texas 78711

Creedmoor Bilingual School. Del Valle, Texas.

Superintendent
Del Valle Independent School District
Del Valle, Texas 78617

El Paso Language Training and Instruction Center. El Paso, Texas.

Assistant Superintendent
Education Center
100 West Rio Grande Street
El Paso, Texas 79999

El Paso Public School programs (includes Applied Language Research Center, Arts and Crafts Center, and Educational Media Center).

Director
Southwest Intercultural Center
El Paso Public Schools
P. O. Box 1710
El Paso, Texas 79999

Experiment in Reading for Mexican-American Students. Corpus Christi, Texas.

Superintendent of Schools
515 Carancahua Street
Corpus Christi, Texas 78401

Improving Language Arts of Bilinguals Through Audio Visual Means. El Paso, Texas.

Dr. Marion Cline Jr.
Principal Investigator
University of Texas at El Paso
El Paso, Texas 79902

Inter-American Education Center. San Antonio, Texas.

Superintendent
San Antonio Independent School District
141 Lavaca Street
San Antonio, Texas 78210

Language - Bilingual Education. San Antonio, Texas.

Program Director
Language - Bilingual Education
Southwest Educational Development Laboratory
Suite 550, Commodore Perry Hotel
Austin, Texas 78701

Laredo Bilingual Project. Laredo, Texas.

Project Director
410 Amhurst Road
Laredo, Texas 78040

The Meaning and Implications of Bilingualism for Texas Schools. Austin, Texas.

Assistant Commissioner
International and Bilingual Education
Texas Education Agency
Austin, Texas 78711

Programa de Educacion Interamericana. Bryan, Texas.

Superintendent
P. O. Box 3948
Bryan, Texas 77801

Project Follow-Through. Corpus Christi, Texas.

Coordinator of Special Programs
Corpus Christi Independent School District
Box 110
Corpus Christi, Texas 78403

Project Teacher Excellence, A Program of Studies for Bilingual Elementary Teachers. San Antonio, Texas.

Project Director
Our Lady of the Lake College
San Antonio, Texas 78207

Rio Grande Valley Education Service Center. Edinburg, Texas.

Mr. Harold Dudley
Texas Regional Center
Edinburg, Texas 78539

Sam Houston Area Curriculum Center. Huntsville, Texas.

Superintendent of Huntsville Public Schools
P. O. Box 791
Huntsville, Texas 77340

San Antonio Bilingual Demonstration and Dissemination Center, San Antonio, Texas.

Superintendent
141 Lavaca Street
San Antonio, Texas 78210

Second Chance (Increasing English proficiency in grades one and two).

Director
Research and Evaluation
El Paso Public Schools
100 West Rio Grande Avenue
P. O. Box 1710
El Paso, Texas 79999

Southwest Intercultural and Language Center. El Paso, Texas.

Director of Compensatory Education
Education Center
100 West Rio Grande Street
El Paso, Texas 79999

Unlimited Potential. San Antonio, Texas.

Superintendent
141 Lavaca Street
San Antonio, Texas 78210

West Texas Innovative Education Center. Alpine, Texas.

Superintendent
808 West Avenue
Alpine, Texas 79830

WASHINGTON D.C.

Teaching English to Speakers of Other Languages. Washington D.C.

Director of English Program
Center for Applied Linguistics
1717 Massachusetts Avenue NW
Washington D.C. 20036